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STEPHEN SPAULDING
1907 - 1925
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THE HAWAIIAN ANNUAL

THE REFERENCE BOOK OF HAWAII

Issued Regularly
since 1875

1914

THOS. G. THRUM

Publisher

Honolulu T. H.

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Thrum's
HAWAIIAN

Almanac and Annual

FOR

1914



THE REFERENCE BOOK OF INFORMATION AND STATISTICS

RELATING TO THE TERRITORY OF HAWAII, OF VALUE TO
MERCHANTS, TOURISTS AND OTHERS



THOS. G. THRUM,
Compiler and Publisher.



Fortieth Year of Publication



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HONOLULU:
1913

Counting House

1914 Calendar 1914

	SUNDAY	MONDAY	TUESDAY ..	WEDNESDAY	THURSDAY ..	FRIDAY	SATURDAY ..		SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY ..	FRIDAY	SATURDAY ..
	4	5	6	7	8	9	10		5	6	7	8	9	10	11
JAN.	11	12	13	14	15	16	17	JULY	12	13	14	15	16	17	18
	18	19	20	21	22	23	24		19	20	21	22	23	24	25
	25	26	27	28	29	30	31		26	27	28	29	30	31	...
	1	2	3	4	5	6	7		2	3	4	5	6	7	8
FEB.	8	9	10	11	12	13	14	AUG.	9	10	11	12	13	14	15
	15	16	17	18	19	20	21		16	17	18	19	20	21	22
	22	23	24	25	26	27	28		23	24	25	26	27	28	29
	...	...	...	...	...	...	...		30	31	...	...	...	...	...
	1	2	3	4	5	6	7		...	...	1	2	3	4	5
MAR.	8	9	10	11	12	13	14	SEPT.	6	7	8	9	10	11	12
	15	16	17	18	19	20	21		13	14	15	16	17	18	19
	22	23	24	25	26	27	28		20	21	22	23	24	25	26
	29	30	31	...	...	...	...		27	28	29	30	...	...	...
	...	...	...	...	1	2	3		...	...	...	...	1	2	3
APR.	5	6	7	8	9	10	11	OCT.	4	5	6	7	8	9	10
	12	13	14	15	16	17	18		11	12	13	14	15	16	17
	19	20	21	22	23	24	25		18	19	20	21	22	23	24
	26	27	28	29	30	...	...		25	26	27	28	29	30	31
	...	...	...	...	...	1	2		...	...	...	...	...	...	...
	3	4	5	6	7	8	9		1	2	3	4	5	6	7
MAY	10	11	12	13	14	15	16	NOV.	8	9	10	11	12	13	14
	17	18	19	20	21	22	23		15	16	17	18	19	20	21
	24	25	26	27	28	29	30		22	23	24	25	26	27	28
	31	...	...	...	...	...	...		29	30	...	...	...	...	...
	...	1	2	3	4	5	6		...	...	1	2	3	4	5
JUNE	7	8	9	10	11	12	13	DEC.	6	7	8	9	10	11	12
	14	15	16	17	18	19	20		13	14	15	16	17	18	19
	21	22	23	24	25	26	27		20	21	22	23	24	25	26
	28	29	30	...	...	...	...		27	28	29	30	31	...	...

Thos. G. Thrum
Researcher and Publisher

THE HAWAIIAN ANNUAL
HONOLULU, T. H.

May. Thomas M. Spaulding
9.26-1923

Spaulding
mem. case

TABLE OF CONTENTS.

SS1190 (Apr. 1928)

CALENDARS, DISTANCES, ETC.

	PAGE
Holidays, Church Days, Eclipses, etc.....	6
Calendars—First, Second, Third and Fourth Quarters.....	7— 10
Inter-Island Distances by Sea; Channel and Ocean Distances....	11
Overland Distances: Oahu, Kauai	12
“ “ Maui, Hawaii, Molokai	13— 15
Elevations of Principal Locations, Throughout the Islands.....	15— 16

STATISTICAL.

Area, Elevation and Population Hawaiian Islands.....	16
Dimensions of Kilauea, Mokuaweo, Haleikala, Iao Valley....	17
Standard and Local Time.....	17
Population by Districts and Islands, Comparative 1900-1910.....	18
by Age, Group, Sex and Race, 1910.....	18
of Honolulu and Hilo, Hawaii, Census of 1910.....	19
Illiterates in Population, Territory of Hawaii.....	19
Vital Statistics Territory of Hawaii, 1913.....	20
Population by Race and Sex, 1910, and Per Cent. of Change....	20
Estimated Population in Hawaii, 1913.....	20
Comparative Table of Population Hawaiian Islands, 1860-1910..	21
Births and Deaths, by Counties and Nationalities.....	21
School Statistics, Territory of Hawaii, 1913.....	22
Value Domestic Merchandise Shipments to U. S., 1912 and 1913..	23
Import Values from U. S., 1912 and 1913.....	24— 25
Hawaii's Commerce with U. S. and Foreign Countries, 1912-13..	26
Imports and Exports, Fiscal Year 1913.....	26
Quantity and Value Principal Articles Domestic Produce to U. S., 1913	27
United States Points of Hawaiian Supplies and Value, 1912-13..	27
Domestic Products Exported to Foreign Countries, 1913.....	27
Value of Imports from Foreign Countries, 1913.....	28
Number and Tonnage of Shipping, Entered and Cleared, 1913....	28
Value Carrying Trade to and from Hawaii, 1913.....	28
Passengers from and to Hawaii, Fiscal Year 1913.....	29
Nationality of Plantation Labor, July, 1913, and August, 1912....	29
Seating Capacity Principal Churches, Halls, Etc., Honolulu.....	29
Hawaii's Annual Trade Balance from 1880—Summary Insurance Business 1912	30
Table Receipts, Expenditures and Public Debt, 1860-1912.....	31
Bonded Debt, June 30, 1913.....	31
Hawaiian Sugar Plantation Statistics, 1875-1913.....	32
Taxes by Divisions and Counties, Fiscal Year 1913.....	33
Assessed Value Real and Personal Property, 1913.....	34
Hawaiian Corporations, Number and Capital, 1913.....	34
Taxes Collected for the Year 1913.....	34
Summary of Meteorological Observations, 1912-13.....	35
Table of Rainfall Throughout the Islands, 1912-13.....	36— 37
Rulers of Hawaii, Accession, Length of Reign, Etc.....	38
Hawaiian Government Changes Since the Monarchy.....	38
Registered Voters by Races, General Elections, 1904-1912.....	223
Hawaiian Sugar Crops, 1908-13.....	224—225

M.T.

ARTICLES.

	Page.
Our Fortieth Anniversary.....	39— 49
In and Around Honolulu.....	49— 74
Moanalua Horticultural Gardens.....	75— 84
Honolulu Sixty Years Ago.....	84— 96
Ancient Hawaiian Music.....	97—107
The Sage of Punahou.....	107—131
The Hawaiian Contribution to English.....	181—135
The Defeat of Kamehameha's Army.....	136—141
Our New Cover Design—Appreciative Visitors.....	141
Railroading in Hilo.....	141—153
Coöperation Among Farmers	154—158
The Hawaiian Homestead of the Future.....	158—170
Brief History of Hawaiian Unskilled Labor.....	170—191
Testing Battelle's Process of Sugar Recovery.....	191—194
Verifying a Royal Birthday (Kamehameha III).....	194—196
Keanini-ula-o-ka-lani (Legend)	196—201
Pepeiao Akua	201—203
Retrospect for 1913.....	203—221

REFERENCE.

List of Sugar Plantations, Mills and Agencies.....	222—223
Postal Service, Territory of Hawaii.....	226—227
Register and Directory, Territorial Officials, Etc.....	228—240
County Officials	241
Federal Officials	241
Index	251

INDEX TO ADVERTISERS.

	PAGE.		PAGE.
Am.-Hawn. S. S. Co.....	11	Hawaiian Trust Co.	14
Audit Co. of Hawaii.....	5	Hawaii Meat Co.....	24
Alexander & Baldwin, Sugar Fac- tors	2	Hollister Drug Co.....	17
Allen & Robinson, Lumber, Etc...	8	Honolulu Constrn. & Draying Co..	24
Alexander Young Hotel.....	15	Honolulu Iron Works Co.....	12
		Honolulu Music Co.....	20
Bank of Hawaii, Ltd.....	3d cover	Hustace-Peck Co., Draymen.....	22
Bank of Honolulu, Ltd.....	9	Jordan's, Dry Goods, Millinery, Etc.	23
Beakbane, W., Engraver.....	16	Lahaina Ntnl. Bank.....	3d cover
Benson, Smith & Co., Druggists..	1	Lewers & Cooke, Ltd., Lumber....	(on back)
Bergstrom Music Co., Pianos, Etc.	23	London, Liverp'l & Globe Ins. Co..	6
Bishop & Co., Bankers.....	5	May & Co., Grocers, Etc.....	21
Bishop Trust Co.....	5	McInerny, M., Hats, Caps, Etc...	25
Brewer & Co., Shipping & Com...	3	Mercantile Printing Co.....	22
Castle & Cooke, Shipping & Com..	4	Nolte's Lunch Room.....	24
Catton, Neill & Co., Machinists...	26	North Brit. & Mercantile Ins. Co..	6
Chambers Drug Co., Ltd.....	19	Oahu Railway & Land Co.....	2d page cover
Davies & Co., Theo. H., Imptrs. & Com.	8	Sachs Dry Goods Co.....	20
Dimond & Co., W. W.....	15	Schaefer & Co., Ltd., F. A., Im- porters & Com.....	8
Dowsett, J. M., Fire Insurance...	20	Silva's Toggery	19
Ehlers & Co., Dry Goods, Etc....	25	Sun Insurance Office of London...	6
Fernandez & Son, A., Hardware..	17	Thames & Mersey Marine Ins. Co..	7
Fidelity & Deposit Co. of Md....	7	The Thomas Pineapple Co.....	25
Fireman's Fund Ins. Company...	7	Thrum's, Ltd., Stationery, Book- seller, Etc.....	last cover
First Ntnl. Bank of Hawaii.....	14	Von Hamm-Young Co., Imptrs...	13
First Ntnl. Bank, Paia.....	3d cover	Waldron, Ltd., Fred. L., Comsn...	21
First Ntnl. Bank, Wailuku..	3d cover	Waterhouse Co., The.....	23
First Trust Co. of Hilo.....	26	Waterhouse Trust Co., Henry....	22
Gilman, J. A., Shipping, Comn., Ins.	11	Yokohama Specie Bank.....	21
Hackfeld & Co., Ship'g & Com...	10		
Hall & Son, E. O., Hardware, Etc.	16		
Hawaiian Annual	25		
Hawaiian Fertilizer Co.....	19		
Hawaiian Gazette Co., Printers...	18		

HAWAIIAN ANNUAL CALENDAR FOR 1914.

Second half of the sixteenth year and first half of the seventeenth year since annexation of Hawaii with the United States.

Twenty-first year since the downfall of the Hawaiian Monarchy.

The 136th year since the discovery of the Hawaiian Islands by Captain Cook.

Holidays Observed at the Hawaiian Islands.

*New Year	Jan. 1	*American Anniversary.....	July 4
Chinese New Year.....	Jan. 25	*Labor Day (First Monday)....	
*Washington's Birthday...	Feb. 22	.....	Sept. 7
Good Friday.....	Apl. 10	*Regatta Day (Third Saturday)	
*Decoration Day.....	May 30	.....	Sept. 19
Kamehameha Day	June 11	Thanksgiving Day.....	Nov. 26
*Birthday Hawn. Republic..	July 4	*Christmas Day.....	Dec. 26

Those distinguished by the Asterisk have been established by law.

Church Days.

Epiphany	Jan. 6	Whit Sunday.....	May 31
Ash Wednesday.....	Feb. 25	Trinity Sunday	June 7
First Sunday in Lent.....	Feb. 9	Corpus Christi	June 11
Good Friday	Apl. 10	Advent Sunday	Nov. 29
Easter Sunday	Apl. 12	Christmas	Dec. 25
Ascension Day	May 21		

Eclipses in 1914.

(Courtesy of Prof. J. S. Donaghho, College of Hawaii.)

There will be four eclipses during the year 1914, two of the sun and two of the moon, and there will be a transit of Mercury over the sun's disk.

I—Annular eclipse of the sun, February 24, invisible in Hawaii.

II—Partial eclipse of the moon, March 11. The moon will rise eclipsed, and will leave the shadow at 7:14 p. m.

III—Total eclipse of the sun, August 20, invisible in Hawaii.

IV—Partial eclipse of the moon, September 4.

Enters shadow..... 1:46 a. m.

Middle of eclipse..... 3:25 a. m.

Leaves shadow

Transit of Mercury over the sun's disk, November 6-7, invisible in the Hawaiian Islands.

FIRST QUARTER, 1914.

JANUARY.					FEBRUARY					MARCH				
D.		H.M.			D.		H.M.			D.		H.M.		
4	First Quar..	2 39.1	a.m.		2	First Quar..	0.2.0	p.m.		4	First Quar.	6.33.0	p.m.	
11	Full Moon..	6.39.0	p.m.		10	Full Moon..	7.4.7	a.m.		11	Full Moon.	5.48.5	p.m.	
18	Last Quar..	1.59.8	p.m.		16	Last Quar.	10.53.0	p.m.		18	Last Quar..	9.9.4	a.m.	
25	New Moon..	8 4.1	p.m.		24	New Moon.	1.32.1	p.m.		26	New Moon.	7.39.1	a.m.	

Day of Mo.	Day of Wk.	Sun Rises...	Sun Sets...		Day of Mo.	Day of Wk.	Sun Rises...	Sun Sets...		Day of Mo.	Day of Wk.	Sun Rises...	Sun Sets...	
		H.M.	H.M.				H.M.	H.M.				H.M.	H.M.	
1	Thurs.	6 38 15	30 1		1	SUN...	6 37 45	50 6		1	SUN...	6 20 36	4 7	
2	Fri...	6 38 45	30 7		2	Mon...	6 37 05	51 3		2	Mon...	6 19 56	5 0	
3	Sat...	6 38 75	31 4		3	Tues...	6 36 65	51 9		3	Tues...	6 18 76	5 4	
4	SUN...	6 38 95	32 1		4	Wed...	6 36 25	52 5		4	Wed...	6 17 96	5 8	
5	Mon...	6 39 15	32 8		5	Thurs.	6 35 75	53 1		5	Thurs.	6 17 06	6 2	
6	Tues...	6 39 35	33 4		6	Fri...	6 35 35	53 7		6	Fri...	6 16 26	6 6	
7	Wed...	6 39 55	34 1		7	Sat...	6 34 85	54 2		7	Sat...	6 15 46	6 9	
8	Thurs.	6 39 75	34 8		8	SUN...	6 34 35	54 8		8	SUN...	6 14 56	7 3	
9	Fri...	6 39 95	35 5		9	Mon...	6 33 85	55 3		9	Mon...	6 13 76	7 7	
10	Sat...	6 40 15	36 2		10	Tues...	6 33 25	55 8		10	Tues...	6 12 86	8 0	
11	SUN...	6 40 25	36 9		11	Wed...	6 32 85	56 3		11	Wed...	6 11 96	8 4	
12	Mon...	6 40 35	37 5		12	Thurs.	6 32 25	56 8		12	Thurs.	6 11 06	8 7	
13	Tues...	6 40 45	38 2		13	Fri...	6 31 65	57 3		13	Fri...	6 10 16	9 0	
14	Wed...	6 40 45	38 9		14	Sat...	6 31 05	57 9		14	Sat...	6 9 26	9 3	
15	Thurs.	6 40 45	39 6		15	SUN...	6 30 45	58 4		15	SUN...	6 8 36	9 7	
16	Fri...	6 40 45	40 3		16	Mon...	6 29 85	58 9		16	Mon...	6 7 46	10 0	
17	Sat...	6 40 45	40 9		17	Tues...	6 29 15	59 4		17	Tues...	6 6 56	10 3	
18	SUN...	6 40 35	41 6		18	Wed...	6 28 55	59 9		18	Wed...	6 5 66	10 6	
19	Mon...	6 40 35	42 3		19	Thurs.	6 27 86	0 4		19	Thurs.	6 4 76	10 9	
20	Tues...	6 40 25	43 0		20	Fri...	6 27 16	0 9		20	Fri...	6 3 86	11 2	
21	Wed...	6 40 15	43 6		21	Sat...	6 26 56	1 3		21	Sat...	6 2 96	11 6	
22	Thurs.	6 39 95	44 3		22	SUN...	6 25 86	1 8		22	SUN...	6 2 06	11 9	
23	Fri...	6 39 85	45 0		23	Mon...	6 25 16	2 2		23	Mon...	6 1 16	12 2	
24	Sat...	6 39 65	45 6		24	Tues...	6 24 36	2 6		24	Tues...	6 0 16	12 5	
25	SUN...	6 39 45	46 3		25	Wed...	6 23 56	3 0		25	Wed...	5 59 26	12 8	
26	Mon...	6 39 25	46 9		26	Thurs.	6 22 76	3 4		26	Thurs.	5 58 36	13 1	
27	Tues...	6 39 05	47 5		27	Fri...	6 21 96	3 8		27	Fri...	5 57 36	13 4	
28	Wed...	6 38 75	48 1		28	Sat...	6 21 16	4 2		28	Sat...	5 56 46	13 7	
29	Thurs.	6 38 45	48 8							29	SUN...	5 55 56	14 0	
30	Fri...	6 38 05	49 4							30	Mon...	5 54 66	14 4	
31	Sat...	6 37 75	50 0							31	Tues...	5 53 76	14 7	

UNDER the provision made by the legislature of 1913 for a revised edition of Andrews' Hawaiian Dictionary it is proposed to enlarge the work to include new words, terms or phrases that by long usage have developed from their pigeon-English origin to recognition as belonging to the language, and worthy a place in a book of definitions for the special benefit of new comers unable to distinguish the spurious from the pure Hawaiian. This might well form a supplement feature rather than sandwich such among those of Hawaiian origin to be apologized for.

SECOND QUARTER, 1914.

APRIL				MAY				JUNE			
D.		H. M.		D.		H. M.		D.		H. M.	
3	First Quar...	9.11.5	a.m.	2	First Quar...	7.59.0	a.m.	1	First Quar...	3.33.0	a.m.
10	Full Moon...	2.58.2	a.m.	9	Full Moon...	2.58.2	a.m.	7	Full Moon...	6.48.3	p.m.
16	Last Quar...	9.22.2	p.m.	16	Last Quar...	11.42.1	a.m.	15	Last Quar...	3.50.0	a.m.
24	New Moon...	0.51.9	p.m.	24	New Moon...	4. 4.8	p.m.	23	New Moon...	5 3.2	a.m.
								30	First Quar...	8.54.5	a.m.
Day of Mo.	Day of Wk.	Sun Rises...	Sun Sets...	Day of Mo.	Day of Wk.	Sun Rises...	Sun Sets...	Day of Mo.	Day of Wk.	Sun Rises...	Sun Sets...
		H.M.	H.M.			H.M.	H.M.			H.M.	H.M.
1	Wed...	5 52 8	6 15 0	1	Fri...	5 28 8	6 25 2	1	Mon...	5 17 2	6 38 2
2	Thurs.	5 51 9	6 15 3	2	Sat...	5 28 2	6 25 6	2	Tues...	5 17 1	6 38 6
3	Fri...	5 51 0	6 15 6	3	SUN...	5 27 6	6 26 0	3	Wed...	5 17 1	6 39 0
4	SAT...	5 50 1	6 16 0	4	Mon...	5 27 0	6 26 4	4	Thurs.	5 17 0	6 39 4
5	SUN...	5 49 2	6 16 3	5	Tues...	5 26 4	6 26 8	5	Fri...	5 17 0	6 39 8
6	Mon...	5 48 3	6 16 6	6	Wed...	5 25 8	6 27 2	6	Sat...	5 17 0	6 40 1
7	Tues...	5 47 4	6 16 9	7	Thurs.	5 25 3	6 27 6	7	SUN...	5 17 0	6 40 5
8	Wed...	5 46 5	6 17 2	8	Fri...	5 24 7	6 28 0	8	Mon...	5 16 9	6 40 9
9	Thurs.	5 45 6	6 17 5	9	Sat...	5 24 3	6 28 5	9	Tues...	5 16 9	6 41 2
10	Fri...	5 44 8	6 17 8	10	SUN...	5 23 8	6 28 9	10	Wed...	5 17 0	6 41 5
11	Sat...	5 44 0	6 18 1	11	Mon...	5 23 4	6 29 3	11	Thurs.	5 17 1	6 41 9
12	SUN...	5 43 2	6 18 4	12	Tues...	5 22 9	6 29 2	12	Fri...	5 17 2	6 42 2
13	Mon...	5 42 3	6 18 8	13	Wed...	5 22 4	6 30 6	13	Sat...	5 17 3	6 42 5
14	Tues...	5 41 5	6 19 1	14	Thurs.	5 22 0	6 30 0	14	SUN...	5 17 5	6 42 8
15	Wed...	5 40 7	6 19 4	15	Fri...	5 21 6	6 31 4	15	Mon...	5 17 6	6 43 1
16	Thurs.	5 39 9	6 19 8	16	Sat...	5 21 2	6 31 9	16	Tues...	5 17 7	6 43 4
17	Fri...	5 39 0	6 20 1	17	SUN...	5 20 8	6 31 3	17	Wed...	5 18 9	6 43 6
18	Sat...	5 38 2	6 20 5	18	Mon...	5 20 5	6 32 7	18	Thurs.	5 18 0	6 43 9
19	SUN...	5 37 4	6 20 8	19	Tues...	5 20 2	6 32 1	19	Fri...	5 18 2	6 44 1
20	Mon...	5 36 6	6 21 2	20	Wed...	5 19 8	6 33 6	20	Sat...	5 18 4	6 44 4
21	Tues...	5 35 8	6 21 5	21	Thurs.	5 19 5	6 33 0	21	SUN...	5 18 6	6 44 6
22	Wed...	5 35 0	6 21 9	22	Fri...	5 19 2	6 34 5	22	Mon...	5 19 8	6 44 7
23	Thurs.	5 34 3	6 22 3	23	Sat...	5 18 8	6 34 9	23	Tues...	5 19 1	6 44 9
24	Fri...	5 33 6	6 22 6	24	SUN...	5 18 5	6 34 9	24	Wed...	5 19 4	6 45 1
25	Sat...	5 32 9	6 23 0	25	Mon...	5 18 3	6 35 4	25	Thurs.	5 19 6	6 45 2
26	SUN...	5 32 2	6 23 3	26	Tues...	5 18 1	6 35 8	26	Fri...	5 19 9	6 45 4
27	Mon...	5 31 4	6 23 7	27	Wed...	5 17 9	6 36 2	27	Sat...	5 20 2	6 45 5
28	Tues...	5 30 8	6 24 1	28	Thurs.	5 17 7	6 36 6	28	SUN...	5 20 5	6 45 6
29	Wed...	5 30 1	6 24 5	29	Fri...	5 17 5	6 37 0	29	Mon...	5 20 8	6 45 7
30	Thurs.	5 29 5	6 24 9	30	Sat...	5 17 4	6 37 4	30	Tues...	5 21 1	6 45 8
				31	SUN...	5 17 3	6 37 8				

VARIOUS reasons might be readily presented to justify the republication of the Hawaiian dictionary and the best that can be produced for the preservation of the language. Judicial cases require it; scholars demand it, and its daily reference needs by the general public is being felt more and more. With the changes in the tongue and people there will be found many words that have become obsolete, at the same time it is hoped the several departments of the language which is referred to in the

THIRD QUARTER, 1914.

JULY				AUGUST				SEPTEMBER			
D.		H.M.		D.		H.M.		D.		H.M.	
7	Full Moon.	3.29.8	a.m.	5	Full Moon..	2.10.7	p.m.	4	Full Moon..	3.31.2	a.m.
14	Last Quar..	9. 1.9	p.m.	13	Last Quar..	2.26.0	p.m.	12	Last Quar.	7.18.3	a.m.
22	New Moon.	4. 8.4	p.m.	21	New Moon..	1.56.5	a.m.	19	New Moon..	11. 5.3	a.m.
29	First Quar.	1.21.0	p.m.	27	First Quar...	5.22.5	p.m.	26	First Quar..	1.33.0	a.m.
Day of Mo..	Day of Wk..	Sun Rises...	Sun Sets...	Day of Mo..	Day of Wk..	Sun Rises...	Sun Sets...	Day of Mo..	Day of Wk..	Sun Rises...	Sun Sets...
		H.M.	H.M.			H.M.	H.M.			H.M.	H.M.
1	Wed...	5 21 46	45 8	1	Sat. ...	5 33 06	38 5	1	Tues...	5 43 46	15 7
2	Thurs...	5 21 76	45 8	2	SUN...	5 33 76	38 0	2	Wed...	5 43 76	14 8
3	Fri....	5 22 16	45 9	3	Mon..	5 34 16	37 4	3	Thurs...	5 43 96	13 9
4	Sat ...	5 22 46	45 8	4	Tues...	5 34 46	36 9	4	Fri....	5 44 26	13 0
5	SUN...	5 22 86	45 8	5	Wed...	5 34 86	36 3	5	Sat. ...	5 44 56	12 0
6	Mon..	5 23 16	45 8	6	Thurs...	5 35 26	35 7	6	SUN...	5 44 76	11 1
7	Tues...	5 23 56	45 8	7	Fri....	5 35 66	35 1	7	Mon..	5 45 06	10 2
8	Wed...	5 23 86	45 7	8	Sat. ...	5 36 96	34 5	8	Tues...	5 45 36	9 2
9	Thurs...	5 24 26	45 6	9	SUN...	5 36 36	33 8	9	Wed...	5 45 56	8 3
10	Fri....	5 24 56	45 5	10	Mon..	5 36 66	33 2	10	Thurs...	5 45 86	7 3
11	Sat. ...	5 24 96	45 4	11	Tues...	5 37 06	32 5	11	Fri....	5 46 06	6 4
12	SUN...	5 25 46	45 3	12	Wed...	5 37 36	31 8	12	Sat. ...	5 46 36	5 4
13	Mon..	5 25 86	45 1	13	Thurs...	5 37 76	31 1	13	SUN...	5 46 56	4 4
14	Tues...	5 26 26	44 9	14	Fri....	5 38 06	30 4	14	Mon..	5 46 86	3 5
15	Wed...	5 26 66	44 7	15	Sat. ...	5 38 36	29 7	15	Tues...	5 47 06	2 5
16	Thurs...	5 27 06	44 5	16	SUN...	5 38 76	29 0	16	Wed...	5 47 36	1 6
17	Fri....	5 27 46	44 3	17	Mon..	5 39 06	28 2	17	Thurs...	5 47 56	0 6
18	Sat. ...	5 27 86	44 1	18	Tues...	5 39 36	27 5	18	Fri....	5 47 85	59 7
19	SUN...	5 28 26	43 8	19	Wed...	5 39 66	26 7	19	Sat. ...	5 48 05	58 7
20	Mon..	5 28 66	43 5	20	Thurs...	5 39 96	25 9	20	SUN...	5 48 35	57 8
21	Tues...	5 29 06	43 2	21	Fri....	5 40 36	25 1	21	Mon..	5 48 55	56 8
22	Wed...	5 29 46	42 8	22	Sat. ...	5 40 66	24 3	22	Tues...	5 48 85	55 9
23	Thurs...	5 29 86	42 5	23	SUN...	5 40 96	23 5	23	Wed...	5 49 05	54 9
24	Fri....	5 30 26	42 1	24	Mon..	5 41 26	22 6	24	Thurs...	5 49 35	53 9
25	Sat. ...	5 30 66	41 7	25	Tues...	5 41 46	21 8	25	Fri....	5 49 65	53 0
26	SUN...	5 31 06	41 3	26	Wed...	5 41 76	20 9	26	Sat. ...	5 49 85	52 1
27	Mon..	5 31 46	40 9	27	Thurs...	5 42 06	20 1	27	SUN...	5 50 15	51 1
28	Tues...	5 31 86	40 5	28	Fri....	5 42 36	19 2	28	Mon..	5 50 45	50 2
29	Wed...	5 32 26	40 0	29	Sat. ...	5 42 66	18 3	29	Tues...	5 50 75	49 2
30	Thurs...	5 32 56	39 5	30	SUN...	5 42 96	17 4	30	Wed...	5 51 05	48 3
31	Fri....	5 32 96	39 0	31	Mon..	5 43 26	16 6				

preface "as feebly represented" will be fully revealed and the acknowledged deficiencies be overcome. To accomplish this will take time and scholarly conference with the best Hawaiian linguists to correct definitions of not a few words that have been forgotten by the old people and unheard of by the younger generation. Those given to Hawaiian research work realize somewhat the difficulty that lies before the revising commission in this, as also to harmonize conflicting alleged authorities.

FOURTH QUARTER, 1914.

OCTOBER					NOVEMBER					DECEMBER				
D.		H.M.			D.		H.M.			D.		H.M.		
3	Full Moon..	7.28.9	p.m.		2	Full Moon..	1.18.6	p.m.		2	Full Moon..	7.50.6	a.m.	
11	Last Quar..	11.3.1	p.m.		10	Last Quar..	1.6.8	p.m.		10	Last Quar..	1.1.7	a.m.	
18	New Moon..	8.3.5	p.m.		17	New Moon..	5.31.9	a.m.		16	New Moon..	4.5.1	p.m.	
25	First Quar.	0.14.0	p.m.		24	First Quar...	3.8.7	a.m.		23	First Quar.	9.54.8	p.m.	
Day of Mo..	Day of Wk.	Sun Rises..	Sun Sets...		Day of Mo..	Day of Wk.	Sun Rises..	Sun Sets...		Day of Mo..	Day of Wk.	Sun Rises..	Sun Sets...	
		H.M.	H.M.				H.M.	H.M.				H.M.	H.M.	
1	Thurs.	5 51 35	5 47 4		1	SUN...	6 3 35	5 23 9		1	Tues...	6 21 55	5 17 3	
2	Fri...	5 51 65	5 46 5		2	Mon...	6 3 85	5 23 3		2	Wed...	6 22 25	5 17 4	
3	Sat...	5 51 85	5 45 6		3	Tues...	6 4 35	5 22 8		3	Thurs.	6 22 85	5 17 5	
4	SUN...	5 52 15	5 44 7		4	Wed...	6 4 95	5 22 4		4	Fri...	6 23 55	5 17 7	
5	Mon...	5 52 45	5 43 8		5	Thurs.	6 5 45	5 21 9		5	Sat...	6 24 25	5 17 9	
6	Tues...	5 52 75	5 42 9		6	Fri...	6 6 05	5 21 4		6	SUN...	6 24 85	5 18 1	
7	Wed...	5 53 15	5 42 0		7	Sat...	6 6 55	5 21 0		7	Mon...	6 25 45	5 18 4	
8	Thurs.	5 53 45	5 41 1		8	SUN...	6 7 15	5 20 7		8	Tues...	6 26 05	5 18 7	
9	Fri...	5 53 85	5 40 2		9	Mon...	6 7 65	5 20 2		9	Wed...	6 26 65	5 19 0	
10	Sat...	5 54 15	5 39 4		10	Tues...	6 8 25	5 19 9		10	Thurs.	6 27 35	5 19 3	
11	SUN...	5 54 55	5 38 6		11	Wed...	6 8 95	5 19 5		11	Fri...	6 27 95	5 19 6	
12	Mon...	5 54 85	5 37 7		12	Thurs.	6 9 55	5 19 2		12	Sat...	6 28 55	5 19 9	
13	Tues...	5 55 15	5 36 9		13	Fri...	6 10 15	5 18 9		13	SUN...	6 29 15	5 20 3	
14	Wed...	5 55 55	5 36 1		14	Sat...	6 10 75	5 18 6		14	Mon...	6 29 75	5 20 6	
15	Thurs.	5 55 85	5 35 3		15	SUN...	6 11 35	5 18 3		15	Tues...	6 30 35	5 21 0	
16	Fri...	5 56 25	5 34 5		16	Mon...	6 11 95	5 18 0		16	Wed...	6 30 85	5 21 4	
17	Sat...	5 56 65	5 33 7		17	Tues...	6 12 55	5 17 8		17	Thurs.	6 31 45	5 21 9	
18	SUN...	5 56 95	5 32 9		18	Wed...	6 13 15	5 17 6		18	Fri...	6 31 95	5 22 3	
19	Mon...	5 57 35	5 32 2		19	Thurs.	6 13 75	5 17 4		19	Sat...	6 32 55	5 22 8	
20	Tues...	5 57 75	5 31 4		20	Fri...	6 14 35	5 17 2		20	SUN...	6 33 05	5 23 3	
21	Wed...	5 58 25	5 30 7		21	Sat...	6 15 05	5 17 1		21	Mon...	6 33 55	5 23 8	
22	Thurs.	5 58 65	5 30 0		22	SUN...	6 15 75	5 17 1		22	Tues...	6 34 05	5 24 3	
23	Fri...	5 59 15	5 29 3		23	Mon...	6 16 35	5 17 0		23	Wed...	6 34 55	5 24 8	
24	Sat...	5 59 55	5 28 7		24	Tues...	6 17 05	5 17 0		24	Thurs.	6 35 05	5 25 3	
25	SUN...	6 0 05	5 28 0		25	Wed...	6 17 65	5 17 0		25	Fri...	6 35 55	5 25 9	
26	Mon...	6 0 45	5 27 4		26	Thurs.	6 18 25	5 17 0		26	Sat...	6 35 95	5 26 5	
27	Tues...	6 0 95	5 26 7		27	Fri...	6 18 95	5 17 0		27	SUN...	6 36 35	5 27 0	
28	Wed...	6 1 45	5 26 1		28	Sat...	6 19 65	5 17 1		28	Mon...	6 36 65	5 27 6	
29	Thurs.	6 1 85	5 25 5		29	SUN...	6 20 25	5 17 1		29	Tues...	6 37 05	5 28 2	
30	Fri...	6 2 35	5 24 9		30	Mon...	6 20 95	5 17 2		30	Wed...	6 37 35	5 28 8	
31	Sat.....	6 2 85	5 24 4							31	Thurs...	6 37 75	5 28 4	

Just fifty years since the Hawaiian government, through its Board of Education, authorized the publication of Andrews' Hawaiian Dictionary, a work that has been out of print for a decade or more, the territorial government makes provision for the compilation, revision and publication of a new edition under the supervision or direction of the Archives Commission. Plans already in hand aim to provide as complete and scholarly a work on the language as may be possible from the authorities available.

INTER-ISLAND DISTANCES BY SEA IN SEA MILES.

AROUND OAHU FROM HONOLULU—ESPLANADE WHARF TO

	Miles.		Miles.
Bell Buoy	1¼	Pearl River Bar.....	6
Diamond Head	5	Barber's Point	15
Koko Head	12	Waianae Anchorage	26
Makapuu Point	16	Kaena Point, N. W. of Oahu....	36
Mokapu	27	Waialua Anchorage	46
Kahuku North Point.....	48	Kahuku N. Pt., Oahu, via Kaena.	58

HONOLULU TO

Lae o ka Laau, S. W. Pt. Molokai	35	Kawaihae, Hawaii.....	144
Kalaupapa, Leper Settlement....	52	Kealahakua, " (direct)	157
West Point of Lanai.....	50	" " (via Kawaihae).	186
Lahaina, Maui.....	72	S. W. Pt. Hawaii " "	233
Kahului, "	90	Punaluu, "	250
Hana, "	128	Hilo, " (direct).....	192
Maalaea, "	86	" " (windward)....	206
Makena, "	96	" " (via Kawaihae).	230
Mahukona, Hawaii	134		

HONOLULU TO

Nawiliwili, Kauai	98	Hanalei, Kauai	125
Koioa, "	102	Niihau	144
Waimea, "	120		

LAHAINA, MAUI, TO

Kaluaaha, Molokai	17	Maalaea, Maui	12
Lanai	9	Makena, Maui	18

KAWAIIHAE, HAWAII, TO

Mahukona, Hawaii	10	Hilo, Hawaii	85
Waipio, Hawaii	37	Lae o ka Mano, Hawaii.....	20
Honokaa, Hawaii	45	Kailua, Hawaii	34
Laupahoehoe, Hawaii	62	Kealahakua, Hawaii	44

HILO, HAWAII, TO

East Point of Hawaii.....	20	Punaluu, Hawaii	70
Keauhou, Kau, Hawaii.....	50	Kaualuu, Hawaii	80
North Point of Hawaii.....	62	South Point of Hawaii.....	85

WIDTH OF CHANNELS.

Oahu and Molokai.....	23	Maui and Lanai.....	7
Diamond Head to S. W. Point of Molokai	30	Maui and Kahoolawe.....	6
Molokai and Lanai.....	7	Hawaii and Maui.....	2½
Molokai and Maui.....	8	Kauai and Oahu.....	63
		Niihau and Kauai.....	15

OCEAN DISTANCES.

HONOLULU TO

San Francisco	2100	Auckland	3810
San Diego	2260	Sydney	4410
Portland, Or.	2360	Hongkong	4920
Brito, Nicaragua	4200	Yokohama	3400
Panama	4720	Guam	3300
Tahiti	2440	Manila, via N. E. Cape.....	4890
Samoa	2290	Victoria, B. C.	2460
Fiji	2700	Midway Islands	1200

OVERLAND DISTANCES.

Revised for the Annual in accordance with latest Government Survey measurements.
The outer column of figures indicates the distance between points

ISLAND OF OAHU.

HONOLULU POST-OFFICE TO

	Miles.		Miles. Inter.
Bishop's corner (Waikiki).....	3.2	Kahana	26.4 4.5
Waikiki Villa	3.6	Punaluu	28.4 2.0
Diamond Head	5.9	Hauula	31.4 3.0
Kaalawai	6.0	Laie	34.4 3.0
	Miles. Inter.	Kahuku Mill	37.2 2.8
Thomas Square	1.0	Kahuku Ranch	40.0 2.8
Pawaa corners	2.0 1.0	Moanalua	3.4
Kamoiilili	3.3 1.3	Kalauao	7.4 4.0
Kaimuki Hill Reservoir..	5.0 1.7	Ewa Church	10.2 2.8
Waialae	6.2 1.2	Kipapa	13.6 3.4
Niu	8.8 2.6	Kaukonahua	20.0 6.4
Koko Head	11.8 3.0	Leilehua	20.0
Makapuu	14.8 3.0	Waialua	28.0 8.0
Waimanalo	20.8 6.0	Waimea	32.4 4.4
Waimanalo, via Pali.....	12.0	Kahuku Ranch	39.4 7.0
		Ewa Church	10.2
Nuuanu Bridge	1.1	Waipio (Brown's)	11.2 1.0
Mausoleum	1.5 0.4	Hoaeae (Robinson's)	13.5 2.3
Electric Reservoir	2.7 1.2	Barber's Point, L. H.	21.5 8.0
Luakaha	4.3 1.6	Nanakuli	23.5 2.0
Nuuanu Dam	5.0 0.7	Waianae Plantation	29.9 6.4
Pali	6.6 1.6	Kahanahaiki	36.9 7.0
Kaneohe	11.9 5.7	Kaena Point	42.0 5.1
Waiahole	18.9 7.0	Waialua to Kaena Pt....	12.0
Kualoa	21.9 3.0		

OAHU RAILWAY: DISTANCES FROM HONOLULU DEPOT TO

	Miles.		Miles.
Moanalua	2.76	Waipio	13.58
Punloa	6.23	Waikale	14.57
Halawa	8.14	Hoaeae	15.23
Aiea	9.37	Ewa Plantation Mill	18.25
Kalauao	10.20	Waianae Station	33.30
Waiau	10.93	Kaena Point	44.50
Pearl City	11.76	Waialua Station	55.80
Waiawa	12.52	Kahuku Plantation	69.50
Wahiawa Station	25.20	Punaluu	80.50

ISLAND OF KAUAI.

NAWILIWILI TO

	Miles. Inter.		Miles. Inter.
Koloa	11.0	Wailua River	7.7 4.4
Lawai	13.8 2.8	Kealia	11.9 4.2
Hanapepe	20.0 6.2	Anahola	15.7 3.8
Waimea	27.1 7.1	Kilauea	23.6 7.9
Waiawa	31.5 4.4	Kalihiwai	26.6 3.0
Nuololo	44.8 13.3	Hanalei	31.8 5.2
		Wainiha	34.8 3.0
Hanamaulu	3.3	Nuololo (no road)	47.0 12.2

ISLAND OF MAUI.

Shortest Distances by Main Road, Corrected by Hugh Howell, County Engineer.

KAHULUI TO

	Miles.	Inter.		Miles.	Inter.
Spreckelsville	4.0	..	Paia P. O.	7.2	..
Paia P. O.	7.2	3.2	Makawao Court House. .	11.6	4.4
Hamakuapoko Mill	9.2	2.0	Olinda	18.5	6.9
Haiku P. O.	11.0	1.8	Haleakala, edge Crater. .	26.6	8.1
Halehaku	17.2	6.2	Haleakala Summit	28.6	2.0
Huelo School	20.2	3.0			
Keanae P. O.	35.5	15.3	Maalaea	10.3	..
Nahiku Landing	49.9	14.4	End of Mountain Road. .	15.8	5.5
Ulaino School	49.2	.7	Olowalu	19.9	4.1
Hana P. O.	55.6	6.4	Lahaina Court House. . .	25.5	5.6
Hamao	58.2	2.6			
Wailua	62.6	4.4	Waiehu	6.4	..
Kipahulu Mill	66.2	3.6	Waihee	7.3	0.9
Mokulau	71.8	5.6	Kahakuloa	16.3	9.0
Nuu	77.0	5.2	Honokohau	23.0	6.7
			Honolua	27.0	4.0
Wailuku	3.8	..	Napili	29.8	2.8
Waikapu	5.9	2.1	Honokawai	33.5	3.7
Maalaea	10.3	4.4	Lahaina Court House. . .	39.0	5.5
Kihei	12.6	2.3			
Kalepolepo	13.9	1.3	MAKENA TO		
Ulupalakua	23.6	9.7	Ulupalakua	3.5	..
Kanaio	26.8	3.2	Kamaole	7.3	3.8
Pico's	33.8	7.0	Waiakoa	13.0	5.7
Nuu	40.6	6.8	Makawao P. O.	20.8	7.8
			Makawao Court House. .	23.0	2.2

ISLAND OF HAWAII.

SOUTH KOHALA.—WAIMEA COURT HOUSE, TO

	Miles.	Inter.		Miles.	Inter.
Hamakua boundary	4.5		Hilo, via Humuula St'n. . .	54.0	25.0
Kukuihaele Mill	11.0	6.5	Keamuku Sheep St'n.	14.0	
Mana	7.7		Napuu	22.0	8.0
Hanaipoe	15.0	7.3	Keawewai	8.0	
Keanakolu	24.0	9.0	Waika	11.0	3.0
Puakala	34.0	10.0	Kahuwa	13.0	2.0
Laumaia	36.5	2.5	Puuhue	17.0	4.0
Auwaiakewa	12.5		Kohala Court House	22.0	5.0
Humuulu Sheep Station.	29.0	16.5	Mahukona	22.0	
Via Laumaia	47.5		Puako	12.0	

NORTH KOHALA.—FOREIGN CHURCH, KOHALA, TO

	Miles.		Miles.
Edge of Pololu Gulch.	4.00	Union Mill	2.25
Niuli Mill	2.80	Union Mill R. R. Station.	3.25
Halawa Mill	1.65	Honomakau	2.55
Hapuu Landing	2.15	Hind's, Hawi	3.25
Kohala Mill . . . . .	.50	Hawi R. R. Station.	4.25
Kohala Mill Landing.	1.50	Honoipu	7.25
Native Church	1.00	Mahukona	10.50
		Puuhue Ranch	7.25

NORTH KOHALA.—ON MAIN ROAD, MAHUKONA TO

	Miles.	Inter.		Miles.	Inter.
Hind's Mill	7.0		Wight's Corner	11.5	1.1
Union Mill Corner.....	8.0	1.0	Niulii Corner	12.8	1.3
Court House	9.2	1.2	Pololu Edge of Gulch....	14.5	1.7
Bond's Corner	9.7	0.5	Puu Hue	5.0	
Kohala Mill Corner.....	10.4	0.7			

SOUTH KOHALA.—KAWAIHAE TO

	Miles.	Inter.		Miles.
Puu Ainako	4.4		Mana, Parker's	19.5
Puuiki	7.7	3.3	Keawewai	6.0
Waiaka, Catholic Church.	9.5	1.8	Puuhue Ranch	10.0
Puuopelu, Parker's	10.8	1.3	Kohala Court House.....	15.0
Waimea Court House.....	11.8	1.0	Mahukona	11.0
Waimea Church	12.2	0.4	Napuu	20.0
Kukuihaele Church	22.1	9.9	Puako	5.0

KONA. KEALAKEKUA TO

Keauhou	6.0		Kawaihae	42.0	4.6
Holualoa	9.6	3.6	Honaunau	4.0	
Kailua	12.0	2.4	Hookena	7.7	3.7
Kaloko	16.0	4.0	Olelomoana	15.2	7.5
Makalawena	19.6	3.6	Hoopuloa	21.6	6.4
Kiholo	27.6	8.0	Boundary of Kau.....	24.8	3.2
Ke Au a Lono bound'ry.	31.6	4.0	Flow of '87.....	32.0	7.2
Puako	37.4	5.8	Kahuku Ranch	36.5	4.5

KAU.—VOLCANO HOUSE TO

Half-way House	13.0		Honuapo	32.6	5.0
Kapapala	18.0	5.0	Naalehu	35.6	3.0
Pahala	23.0	5.0	Waiohinu	37.1	1.5
Punaluu	27.6	4.6	Kahuku Ranch	43.1	6.0

PUNA.—HILO COURT HOUSE TO

(By new road.)

	Miles.		Miles.
Keauu, Forks of Road.....	9.0	Kaimu	32.0
Pahoa	20.0	Kalapana	33.0
Pohoiki	28.0	Keauhou	50.0
Kapoho (Lyman's)	32.0	Panau	40.0
Opihikao	31.0	Volcano House via Panau....	56.0
Kamaili	26.0	Sand Hills, Naawale, old road...	18.5
Kamaili Beach	29.0	Kapoho, old road	22.0

TO VOLCANO.—HILO TO

Shipman's	1.7	Mountain View	16.3
Edge of Woods	4.1	Mason's	17.5
Cocanut Grove	8.0	Hitchcock's	23.5
Branch Road to Puna.....	9.0	Cattle Pen	24.7
Furneaux's	13.2	Volcano House	31.0

THROUGH HILO DISTRICT TO

Honolii Bridge	2.5	Honohina Church	17.8
Papaikou Office	4.7	Waikaumalo Bridge	18.8
Onomea Church	6.9	Pohakupuka Bridge	21.0
Kaupakuea Cross Road.....	10.7	Maulua Gulch	22.0
Kolekole Bridge	14.3	Kaiwilahilahi Bridge	24.0
Hakalau, east edge gulch.....	15.0	Lydgate's House	26.1
Umauma Bridge	16.9	Laupahoehoe Church	26.7

THROUGH HAMAKUA.—LAUPAHOEHOE CHURCH TO

	Miles.		Miles.
Bottom Kawalii Gulch.....	2.0	Kuaikalua Gulch	22.0
Ookala, Manager's House.....	4.0	Kapulena Church	23.9
Kealakaha Gulch	6.0	Waipanihua	24.3
Kukaiu Gulch	8.0	Stream at Kukuihaele.....	26.0
Horner's	8.5	Edge Waipio	26.5
Catholic Church, Kainehe.....	9.0	Bottom Waipio	27.0
Notley's, Paauilo	10.5	Waimanu (approximate)	32.5
Kaumoalii Bridge	12.5	Kukuihaele to Waimea (approximate)	10.5
Bottom Kalopa Gulch.....	14.0	Gov't. Road to Hamakua Mill....	1.5
Wm. Horner's, Paauhau.....	15.2	Gov't. Road to Paauhau Mill....	1.0
Paauhau Church	16.3	Gov't. Road to Pacific Sugar Mill,	
Holmes' Store, Honokaa.....	18.0	Kukuihaele	0.7
Honokaia Church	20.5		

ISLAND OF MOLOKAI.

KAUNAKAKAI TO

Meyer's, Kalae	5.0	Pukoo	15.0
Kalaupapa	9.3	Halawa	25.0
Kamalo	9.0	Ka Lae o ka Laau.....	19.0
Kaluaaha	13.5		

TABLE OF ELEVATIONS OF PRINCIPAL LOCALITIES THROUGHOUT THE ISLANDS.

(From Government Survey Records; Measurements from mean Sea Level.)

OAHU PEAKS.

	Feet.		Feet.
Kaala, Waianae Range.....	4030	Kaimuki Hill	291
Palikeya, Waianae Range.....	3111	Koko Head, higher crater.....	1205
Konahuanui Peak, S. of Pali....	3105	Koko Head, lower crater.....	644
Lanihuli Peak, N. of Pali.....	2781	Makapuu, east point of island....	665
Tantalus or Puu Ohia.....	2013	Mokapu, crater off Kaneohe....	681
Awawaloa (Olympus), Manoa....	2447	Olomana, sharp peak, Kailua....	1645
Round Top or Ualakaa.....	1049	Maelieli, sharp peak, Heeia....	715
Punchbowl Hill or Puowaina....	498	Ohulehule, sharp peak, Hakipuu..	2263
Diamond Head or Leahi.....	761	Koolau Range, above Wahiawa..	2381

LOCALITIES NEAR HONOLULU.

Nuuanu Road, cor. School St....	40	Nuuanu Road, Queen Emma's..	358
" " second bridge....	77	" " cor. above Elec-	
" " cor. Judd St....	137	tric Light Works.....	429
" " Cemetery gate....	162	Nuuanu Road, large bridge....	735
" " Mau's'l'm gate... 206		" " Luakaha gate....	848
" " Schaefer's gate.. 238		" " Pali, old station..	1214

MOLOKAI, ETC.

Kamakou Peak	4958	Kaolewa Pali, o'v'lkng. Settlmnt..	2100
Oloku Peak	4600	Meyer's, Kalae	1485
Kaunuuohua	4535	Mauna Loa, near Kaunakakai....	1382
Kalapamoa	4004	Kualapuu Hill	1018
Puu Kolekole	3951	Kahoolawe (Moaula Hill).....	1472
Kaulahuki	3749	Molokini	160
Kaapahu Station	3563	Lanai	3400

HAWAII.

	Feet.		Feet.
Mauna Kea	13,825	Hiilawe Falls	1700
Mauna Loa	13,675	Parker's, Mana	3505
Hualalai	8275	Honokaa Store	1100
Kohala Mountains	5489	Kaluamakani, Hamakua ...	7584
Kilauea Vol. House, by leveling	3971	Lower edge forest, Hamakua .	1700
Kulani, near Kilauea.....	5574	Lower edge forest, Hilo.....	1200
Kalaiheia	6660	Laupahoehoe Pali	385
Aahuwela, near Laumaia.....	7747	Kauku Hill	1964
Hitchcock's, Puakala	6325	Puu Alala	762
Ahumo'a	7034	Halai Hill	347
Waimea Court House.....	2669	Puu o Nale, Kohala.....	1797
Waipio Pali, in Mountain....	3000	B. D. Bond's, Kohala.....	521
Waipio Pali, on S (Road)....	900	Episcopal Church, Kainaliu...	1578
Waipio Pali, on N. side.....	1394	Puu Enuhe, Kau.....	3327
Waimanu, at sea.....	1600	Puu Hoomaha, Kau.....	6636
Waimanu, in mountain.....	4000	Puu ka Pele, Kau.....	5768
Waiau Lake, Mauna Kea.....	13,041	Pohaku Hanalei, Kau.....	12,310
Poliahu, Mauna Kea.....	13,646	Kapoho Hill, Puna.....	432
Kalaieha, N. Hilo.....	6738	Kaliu Hill, Puna.....	1065
Pohaku Hanalei, Humuula....	7343	Olaa Trig. Station.....	622

MAUI.

Haleakala (Red Hill).....	10,032	Puu Kapuai, Hamakua.....	1150
Mt. Kukui, West Maui.....	5790	Puu o Umi, Haiku.....	629
Piiholo, Makawao	2256	Puu Pane, Kula.....	2568
Puu Olai (Miller's Hill).....	355	Lahainaluna Seminary	600
Puu Io, near Ulupalakua.....	2841	Kauiki, Hana	392
Ulupalakua, about	1800	"Sunnyside" Makawao	930
Olinda, Makawao	4043	Paia Foreign Church, about. .	850
Puu Pane, Kahikinui.....	3988	Eka, crater in Waihee.....	4500
Puu Niania, Makawao.....	6850	Keakaamanu, Hana	1250

KAUAI

Hauptu	2030	Mt. Waialeale, central peak...	5170
Kilohana, about	1100	Namolokama	4200

NOTE—A large number of approximate elevations of stations where rain records are kept may be found in the Rain Tables in this Annual.

Area, Elevation and Population of the Hawaiian Islands.

(As revised by latest official Records.)

Islands.	Area in Statute Square Miles.	Acres.	Height in Feet.	Population in 1910.
Hawaii.....	4,015	2,570,000	13,825	55,382
Maui.....	728	466,000	10,032	28,623
Oahu.....	598	384,000	4,030	81,993
Kauai.....	547	348,000	5,250	23,744
Molokai.....	261	167,000	4,958	1,791
Lanai.....	139	86,000	3,400	131
Niihau.....	73	62,000	1,300	208
Kahoolawe.....	44	44,000	1,472	2
Midway.....	...	.....	43	35

Total area of Hawaiian Islands, 6,405 miles.

The outlying islets on the N. W. may amount to 6 square miles.

KILAUEA, ISLAND OF HAWAII.

Corrected for Deflection of the Vertical.

Area, 4.14 square miles, or 2,650 acres.
 Circumference, 41,500 feet, or 7.85 miles.
 Extreme width, 10,300 feet, or 1.95 miles.
 Extreme Length, 15,500 feet, or 2.93 miles.
 Elevation, Volcano House, 4,000 feet.

MOKUAWEOWEO.

The Summit Crater of Mauna Loa, Island of Hawaii.

Area, 3.70 square miles, or 2,370 acres.
 Circumference, 50,000 feet, or 9.47 miles.
 Length, 19,500 feet, or 3.7 miles.
 Width, 9,200 feet, or 1.74 miles. Elevation of summit, 13,675 feet.

HALEAKALA, MAUI.

The great Crater of Maui, the largest in the world.

Area, 19 square miles, or 12,160 acres.
 Circumference, 105,600 feet, or 20 miles.
 Extreme Length, 39,500 feet, or 7.48 miles.
 Extreme width, 12,500 feet, or 2.37 miles.
 Elevation to summit, 10,032 feet.
 Elevation of principal cones in crater, 8,032 and 1,572 feet.
 Elevation of cave in floor of crater, 7,380 feet.

IAO VALLEY, MAUI.

Length (from Wailuku), about 5 miles.
 Width of Valley, 2 miles.
 Depth, near head, 4,000 feet.
 Elevation of Puu Kukui, above head of Valley, 5,700 feet.
 Elevation of Crater of Eke, above Waihee Valley, 4,500 feet.

Standard and Local Time.

The Standard Time of the Hawaiian Islands is that of Longitude $157^{\circ} 30'$ W., 10 h. 30 m. slower than Greenwich Time. The time of sunrise and sunset given in the tables is of course local time; to correct this to standard time, add or subtract a correction corresponding with the differences between $157^{\circ} 30'$ and the longitude of the station.

The corrections would be for the following stations:

Niihau	+ 10:8 m	Wailuku, Maui	— 4:0 m
Mana, Kauai	+ 9:0 m	Haiku, Maui	— 4:8 m
Koloa, Kauai	+ 7:9 m	Hana, Maui	— 6:0 m
Kilauea, Kauai	+ 7:3 m	Kailua, Hawaii	— 6:2 m
Waialua, Oahu	+ 2:5 m	Kohala, Hawaii	— 7:0 m
Kahuku, Oahu	+ 2:0 m	Kukuihaele, Hawaii	— 8:0 m
Honolulu, Oahu	+ 1:5 m	Punaluu, Hawaii	— 8:0 m
Kalae, Molokai	— 2:0 m	Ookala, Hawaii	— 9:0 m
Lanai	— 2:5 m	Hilo, Hawaii	— 9:8 m
Lahaina, Maui	— 3:0 m		

Total Population by Districts and Islands — Comparative, 1900 and 1910.

From Census Bulletin, Washington, D. C.

HAWAII	1900	1910	OAHU	1900	1910
Hilo	19,785	22,545	Honolulu	39,306	52,183
Puna	5,128	6,834	Ewa	9,689	14,627
Kau	3,854	4,078	Waianae	1,008	1,958
North Kona	3,819	3,377	Waialua	3,285	6,770
South Kona	2,372	3,191	Koolauloa	2,372	3,204
North Kohala	4,366	5,398	Koolaupoko	2,844	3,251
South Kohala	600	922			
Hamakua	6,919	9,037		58,504	81,993
			Midway		35
MAUI	47,843	55,382	KAUAI		
Lahaina	4,352	4,787	Waimea	5,714	7,987
Wailuku	7,953	11,742	Niihau	172	208
Hana	5,276	3,241	Koloa	4,564	5,769
Makawao	7,236	8,855	Kawaihau	3,220	2,580
			Hanalei	2,630	2,457
			Lihue	4,434	4,951
Molokai	24,797	28,625			
Lanai	3,123	1,791		20,734	23,952
		131	Total whole group	154,001	191,909

Population in 1910 by Age, Groups, Sex and Race.

COLOR OR RACE	Under 21 yrs.		21 yrs. and over		All ages		
	Male	Female	Male	Female	Male	Female	TOTAL
Hawaiian	5,513	5,404	7,926	7,198	13,439	12,602	26,041
Caucasian-Hawn.	2,956	2,813	1,482	1,521	4,438	4,334	8,772
Asiatic-Hawn.	1,363	1,391	449	531	1,812	1,922	3,734
Portuguese	6,599	6,508	4,974	4,222	11,573	10,730	22,303
Porto Rican	1,315	1,216	1,563	796	2,878	2,012	4,890
Spanish	610	569	468	343	1,078	912	1,990
Other Caucasian	2,359	2,244	6,896	3,368	9,255	5,612	14,867
Chinese	3,453	2,930	13,695	1,596	17,148	4,526	21,674
Japanese	12,989	11,016	41,794	13,875	54,783	24,891	79,674
Korean	400	306	3,531	296	3,931	602	4,533
Black and Mulatto	191	196	224	84	415	280	695
All Other	1,355	245	994	142	2,349	387	2,736
Total	39,103	34,838	83,996	33,972	123,099	68,810	191,909

Population of Honolulu, various census periods.

1890	22,907	1896	29,926
1900	39,300	1910	52,183

Population of Honolulu and Hilo by Race and Sex, 1910.

From Tables of the Bureau of Census.

RACE	SEX	Honolulu	Hilo
Hawaiian.....	{ Male.....	3,969	369
	{ Female....	3,941	295
Caucasian-Hawaiian.....	{ Male.....	2,000	218
	{ Female....	2,233	200
Asiatic-Hawaiian.....	{ Male.....	653	98
	{ Female....	727	122
Portuguese.....	{ Male.....	3,042	552
	{ Female....	3,105	586
Porto Rican.....	{ Male.....	210	63
	{ Female....	177	46
Spanish.....	{ Male.....	141	37
	{ Female....	117	30
Other Caucasian.....	{ Male.....	5,627	382
	{ Female....	3,573	295
Chinese.....	{ Male.....	6,948	335
	{ Female....	2,626	100
Japanese.....	{ Male.....	7,659	1,699
	{ Female....	4,434	1,080
Korean.....	{ Male.....	352	26
	{ Female....	108	1
Filipino.....	{ Male.....	68	66
	{ Female....	19	10
Negro.....	{ Male.....	179	6
	{ Female....	148	....
All other.....	{ Male.....	66	15
	{ Female....	61	14
Grand Total.....		52,183	6,745
Total.....	{ Male.....	30,914	3,866
	{ Female....	21,269	2,879

Illiterates in the Population Territory of Hawaii, 10 Years of Age and Over, Census of 1910.

RACE	Per cent.	RACE	Per cent.
All races	26.8	Spanish	49.6
Hawaiian	4.7	Other Caucasian	3.5
Caucasian-Hawaiian	1.3	Chinese	32.3
Asiatic-Hawaiian	1.8	Japanese	35.0
Portuguese	35.4	Korean	25.9
Porto Rican	73.2	Filipino and all other.....	32.4

The Census Bureau classes as illiterate any person ten years of age, or over, who is unable to write, regardless of ability to read.

Population by Race and Sex, 1910, and Per Cent of Change Since 1900.

RACES	Total Populat'n	Native Born	Foreign Born	Males	Females	% of Change.
Hawaiian	26,041	26,041	.....	13,439	12,602	12.58 dec
Caucas'n-Haw..	8,772	8,772	.....	4,448	4,334	} 59.35 inc
Asiatic-Haw...	3,734	3,734	.....	1,812	1,922	
Portuguese....	22,303	13,766	8,537	11,573	10,730	42.28 "
Spanish	1,990	357	1,633	1,078	912	new
Porto Rican...	4,890	4,830	.....	2,878	2,012	"
Other Caucas'n	14,867	9,917	4,950	9,255	5,612	40.56 inc.
Chinese.....	21,674	7,195	14,479	17,148	4,526	15.87 dec.
Japanese.....	79,674	19,889	59,785	54,783	24,891	30.37 inc.
Korean	4,533	362	4,171	3,931	602	} 146.03 " "
Black and M'to	695	602	93	415	280	
All Others.....	2,736	2,632	104	2,349	387	
Total	191,909	98,157	93,752	123,099	68,810	24.62 ^{net} inc

Estimated Population, 1913, Territory of Hawaii, by Nationality.

From Board of Health Report.

RACE	Number	RACE	Number
American	} 23,374	Part-Hawaiian	13,730
British		Japanese	83,100
German		Portuguese	23,260
Russian		Porto Rican	5,030
Chinese	21,500	Spanish	4,820
Filipino	12,600	Others	5,400
Hawaiian	24,930	Total	217,744

Vital Statistics, Territory of Hawaii, 1913.

For Fiscal Year ending June, compiled from Board of Health Report.
Table of Births, Marriages and Deaths by Counties.

ISLANDS, ETC.	Estmtd. Popltn	Births	Marria ges	Deaths
Honolulu.....	59,960	1,591	2,331	1,112
Other Districts of Oahu County.....	37,369	789	95	360
Hawaii County	60,736	1,496	411	864
Maui County	33,224	1,030	247	571
Kalawao County	730	21	19	53
Kauai County.....	26,725	641	128	272
Total, 1912-13	217,744	5,568	3,231	3,232
1911-12 .....	.....	5,147	2,882	3,071
„ 1910-11 .....	.....	4,494	2,266	3,297

Births and Deaths by Nationalities and Counties, 1913.

NATIONALITY	Honolulu		Other dist. Oahu		Hawaii		Maui		Kalawao		Kauai		TOTAL	
	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths	Births	Deaths
American...	122	58	13	15	15	12	9	4	1	4	.....	163	90	
British.....	29	18	.....	.....	13	9	4	2	.....	1	2	47	31	
Chinese.....	312	129	54	22	65	30	32	27	2	26	20	489	230	
German.....	12	9	.....	2	3	2	3	.....	1	7	.....	25	14	
Hawaiian...	188	409	47	68	157	201	123	172	17	46	42	45	574	941
Part Haw'n	303	101	51	15	100	26	124	32	4	.....	45	4	627	178
Japanese....	443	207	478	155	578	322	418	199	.....	1	313	128	2,230	1,012
Portuguese	112	94	66	32	332	104	208	70	.....	1	123	28	841	329
Porto Rican	13	13	31	11	97	23	44	13	.....	35	7	220	67	
Spanish.....	20	14	17	12	81	26	37	10	.....	1	15	7	170	70
Filipino.....	9	16	15	20	34	94	16	25	.....	18	23	92	178	
Others.....	28	44	17	8	21	15	12	17	.....	12	8	90	92	
Total.....	1,591	1,112	789	360	1,496	864	1,030	571	21	53	641	272	5,568	3,232

Comparative Table of Population, Hawaiian Islands— Census Periods 1860-1910.

Islands	1860	1866	1872	1878	1884	1890	1896	1900	1910
Hawaii ..	21,481	19,808	16,001	17,034	24,994	26,754	33,285	46,843	55,382
Maui	16,400	14,035	12,334	12,109	15,970	17,357	17,726	24,797	28,623
Oahu	21,275	19,799	20,671	20,236	28,068	31,194	40,205	58,504	81,993
Kauai ...	6,487	6,299	4,961	5,634	*8,935	11,643	15,228	20,562	23,744
Molokai	2,864	2,299	2,349	2,581	.....	2,652	2,307	2,504	1,791
Lanai....	646	394	348	214	2614	174	105	619	131
Niihau....	647	325	233	177	.....	216	164	172	208
Kahoolawe...	.....	.....	.....	.....	.....	.....	.....	.....	2
Midway ..	.....	.....	.....	.....	.....	.....	.....	.....	35
Total ..	69,800	62,959	56,897	57,985	80,578	89,900	109,020	154,001	191,909
All Foreigners	2,716	4,194	5,366	10,477	36,346	49,368	69,516	116,366	153,362
Hawaiians ...	67,084	58,765	51,531	47,508	44,228	40,622	39,504	37,635	38,547

* Including Niihau.

The nationality of teachers in all schools of the Islands, June, 1913, was as follows: Hawaiian, 84; Part Hawaiian, 203; American, 472; English, 54; Germans, 17; Portuguese, 65; Chinese, 36; Japanese, 29; Korean, 3; Spanish 1; other Foreigners, 22; Total, 986.

School Statistics, Territory of Hawaii, 1913.

From Report of the Superintendent of Public Instruction,

NUMBER OF SCHOOLS, CLASS, ETC.

ISLANDS	PUBLIC SCHOOLS June 28, 1913.					PRIVATE SCHOOLS Dec. 31, 1912.		
	No. of Schools	No. of Teachers	No. of Pupils			No. of Schools	No. of Teachers	No. of Pupils
			Boys	Girls	Total			
Hawaii	61	210	4,432	3,735	8,167	7	32	821
Oahu	38	251	5,298	4,423	9,721	33	240	5,401
Mauai, Molokai....	44	120	2,161	1,832	3,993	9	35	985
Kauai	18	93	1,993	1,757	3,750	2	5	1,000
Totals	161	674	13,884	11,747	25,631	51	312	7,307

NUMBER OF SCHOOLS, TEACHERS AND PUPILS.

CLASS	Schools	TEACHERS			PUPILS		
		M.	F.	Total	M.	F.	Total
Public Schools	161	136	538	674	13,884	11,747	25,631
Private "	51	102	210	312	4,005	3,302	7,307
Totals	212	238	748	986	17,889	15,049	32,938

AGES OF PUPILS IN PUBLIC AND PRIVATE SCHOOLS.

SCHOOLS	Under 6	6-15	Over 15	Total
Public Schools	229	24,490	912	25,631
Private "	1,604	4,625	1,078	7,307
Total	1,833	29,115	1,990	32,938

NATIONALITY OF PUPILS.

	Public	Private		Public	Private
Hawaiians	3,446	844	Spanish	676	2
Part Hawaiians,...	2,881	1,265	Chinese	2,536	1,247
Americans	516	723	Japanese	9,454	1,536
English	83	68	Porto Ricans	703	54
Germans	162	108	Korean	304	96
Portuguese	4,341	1,156	Rusians	102	6
Filipinos	213	21	Other Foreigners..	214	161
			Total	25,631	7,307

**Value Domestic Mdse. shipments to the United States from
Hawaii for fiscal years ending June 30, 1912 and 1913.**

Compiled from Monthly Summary of Commerce and Finance, Bureau of Statistics.

Articles.	1912	1913
Animals.....	\$ 638	\$ 12,7998
Art Works, Paintings, etc.....	1,146	12,505
Books and printed matter.....	6,703	.....
Beeswax.....	10,131	10,361
Breadstuffs.....	5,983	6,228
Chemicals, drugs, etc.....	20,111	4,044
Coffee.....	336,343	352,965
Cotton and manufactures of.....	979	4,048
Fertilizers.....	15,940	.....
Fibers, unmanufactured—Sisal.....	34,735	44,221
Fish.....	129	192
Fruits and nuts.....	2,744,042	3,779,527
Hides and skins.....	110,450	137,128
Honey.....	35,973	57,450
India Rubber, crude.....	3,811	5,993
Jewelry.....	514	.....
Machinery and parts of.....	4,877	825
Marble and stone.....	76	.....
Meat products, tallow.....	11,936	3,863
Molasses.....	77,241	140,610
Musical instruments.....	5,614	8,835
Natural history specimens.....	5,000	.....
Oils.....	331	.....
Paper and manufactures of.....	7,697	6,329
Pineapple juice.....	136,982	78,593
Rice.....	212,146	185,943
Spirits, Wines, etc.....	8,408	.....
Straw and palm leaf, manufactures of.....	894	1,113
Sugar, brown.....	48,143,530	35,235,170
Sugar, refined.....	1,817,979	1,372,650
Tobacco leaf, unmanufactured.....	94,978	.....
Vegetables.....	4,882	10,023
Wood and manufactures of.....	64,097	67,287
Wool, raw.....	61,780	71,113
Wool, manufactures of.....	379	.....
All other articles.....	9,471	51,883
Total value shipments Hawaiian products...	\$53,989,223	\$41,661,442
Returned shipments merchandise.....	1,066,593	991,020
Shipments foreign merchandise.....	20,254	60,772
Total to United States.....	\$55,076,070	\$42,713,184

Import Values from United States, comparative, for fiscal years ending June, 1912 and 1913.

Compiled from Monthly Summary of Commerce and Finance, Bureau of Statistics.

Articles.	Domestic Merchandise	
	1912	1913
Agricultural Implements	\$ 53,634	\$ 42,829
Animals ..	328,229	322,041
Art Works	10,352	22,669
Automobiles, and parts of	930,619	1,289,806
Books, Maps, Engravings, etc.	163,564	292,911
Boots and Shoes	371,831	475,980
Brass, and manufactures of	73,020	108,004
Breadstuffs ..	2,423,401	2,282,034
Brooms and Brushes	34,403	38,256
Candles ..	10,243	12,851
Carriages, Cars, etc., and parts of	199,418	302,255
Cement ..	190,350	278,657
Chemicals, Drugs, Dyes, etc.	379,624	418,950
Clocks, Watches, and parts of	27,984	41,116
Coal ..	13,625	63,991
Cocoa and Chocolate	30,108	36,958
Coffee, prepared	16,536	13,142
Copper, and manufactures of	48,715	118,123
Cork, manufactures of	8,377	18,002
Cotton, manufactures of, and clothing	2,367,093	2,577,285
Earthen, Stone and Chinaware	80,057	109,374
Eggs ..	37,282	51,191
Electrical Machinery and instruments.....	243,720	528,958
Explosives ..	235,953	582,067
Fertilizers ..	941,329	966,310
Fibers, Textile Grasses, manufactures of	119,370	173,860
Fish ..	447,863	418,956
Fruits and Nuts	307,867	372,274
Furniture of Metal	34,312	52,232
Glass and Glassware	196,307	265,101
Grease, lubricating, etc.	14,687	18,013
Hay ..	247,544	323,821
Household and Personal Effects	131,328	216,699
India Rubber, manufactures of	399,552	545,285
Instruments for scientific purposes, telephones, etc.	225,386	18,754
Iron and Steel and manufactures of	82,076	131,083
Sheets and Plates, etc.	247,768	231,931
Builders' Hardware, etc.	364,325	1,106,072
Machinery, Machines, parts of	824,961	1,204,895
Nails, Spikes, Pipes, etc.	2,705,131	3,595,832
Jewelry and manufactures, Gold and Silver ...	50,779	191,770
Lamps, Chandeliers, etc.	43,864	40,996
Lead and manufactures of	81,862	92,255
Leather and manufactures of	231,545	394,328
Marble, Stone and manufactures of	56,185	30,478

Import Values from United States for 1912-13—Continued.

Articles.	Domestic Merchandise	
	1912	1913
Motor Boats	\$ 5,246	\$ 161
Musical Instruments	65,462	88,761
Naval Stores	22,713	15,486
Oil Cloth	16,254	250,747
Oils: Animal	599	1,084
Mineral, Crude	956,093	699,700
Refined, etc.	749,410	1,181,790
Vegetable	77,200	80,134
Paints, Pigments and Colors	241,429	283,351
Paper and manufactures of	392,200	407,121
Perfumery, etc.	28,270	36,302
Phonographs, etc.	34,428	48,461
Photographic Goods	92,372	132,193
Plated Ware	25,652	47,893
Provisions, etc., Beef Products	71,507	138,936
Hog and other Meat Products	417,325	625,496
Dairy Products	458,228	578,337
Rice	15,229	189,986
Seeds	9,295	8,466
Silk and manufactures of	62,418	87,648
Soap; Toilet and other	193,517	200,626
Spirts, etc., Malt Liquors	206,128	255,738
Spirits, distilled	153,999	176,988
Wines	364,706	393,130
Starch	17,306	20,922
Straw and Palm Leaf, manufactures of	66,194	102,001
Sugar, Molasses and Syrup	53,019	78,257
Confectionery	83,669	79,213
Tin and manufactures of	69,017	54,366
Tobacco, manufactures of	762,466	697,995
Toys	40,508	70,854
Trunks, Valises and Traveling Bags	56,071	82,450
Varnish	20,296	13,572
Vegetables	364,576	331,034
Wood and manufactures of—		
Logs and round timber	32,918	17,462
Lumber, Shingles, etc.	1,239,668	1,729,904
Doors, Sash, Blinds and all other	315,621	132,893
Furniture	245,401	258,764
Wool and manufactures of	202,672	261,994
Zinc, manufactures of	5,370	11,062
All other articles	431,449	452,226
Total domestic merchandise.....	\$24,418,671	\$30,411,899
Total value foreign merchandise from U. S..	229,234	234,190

Hawaii's Commerce with U. S. and Foreign Countries.

Total Import with Export Values for 1912 and 1913.

Compiled from Monthly Summary of Commerce and Finance, Bureau of Statistics.

Countries.	Imports.		Exports.	
	1912	1913	1912	1913
Austria-Hungary.....	\$ 6,166	\$ 478	\$ 263	\$
Belgium.....	13,656	62,542	963	4,373
Canada.....	22,778	24,144	45,579	64,201
Great Britain.....	711,602	797,839	86,719	144,352
Germany.....	364,412	424,560	110,120	97,715
France.....	13,786	25,241	19,651	18,697
Italy.....	3,007	4,963	175	.....
Netherlands.....	2,038	13,582	5,134	.....
Norway.....	2,717	1,377	180	11,059
Portugal.....	1,802	2,073	.....	.....
Switzerland.....	329	1,029	.....	.....
Sweden.....	4,514	5,784	.....	.....
Chile.....	590,589	709,535	.....	.....
China.....	17,408	30,591	6,644	6,236
East Indies.....	630,633	850,363	1,156	300
Hong Kong.....	329,814	393,294	3,704	6,686
Japan.....	2,414,346	2,845,756	26,845	113,941
Australasia.....	332,595	472,761	8,363	15,337
Oceania.....	47,343	64,194	2,830	8,565
Korea.....	2,232	895	45	.....
Philippines.....	83,995	140,650	54,220	264,915
United States*.....	24,652,905	30,646,089	55,076,070	42,713,184
All other.....	2,582	1,567	682	2,269
Total.....	\$30,251,349	\$37,519,620	\$55,449,343	\$43,471,830

* Not including coin shipments.

Exports and Imports for fiscal year ending June 30, 1913.

Exports—Domestic produce to United States.....	\$42,652,462
Foreign produce to United States.....	60,722
Coin shipments to United States.....	543,615
Domestic produce to Foreign Countries.....	740,284
Foreign produce to Foreign Countries.....	18,362
Total export value.....	\$44,015,445
Imports—Domestic produce from United States.....	\$30,411,899
Foreign produce from United States.....	234,190
Coin shipments from United States.....	1,710,531
Produce from Foreign Countries.....	6,873,531
Total import value.....	\$39,230,151

Quantity and Value of principal articles of Domestic produce Shipped to U. S. for the fiscal year ending June 30, 1913.

Compiled from Monthly Summary of Commerce and Finance, Bureau of Statistics.

Articles		Quantity	Value
Sugar, raw	pounds.....	1,056,244,887	\$35,235,170
Sugar, refined	"	29,117,457	1,372,650
Coffee, raw	"	2,149,875	352,965
Rice	"	3,529,867	185,943
Fibers, sisal.....	tons.....	325	44,221
Fruits: Fresh Bananas.....	bunches.....	240,079	150,907
Fresh Pineapples.....	.....	.....	58,022
Canned Pineapples.....	.....	.....	3,566,201
All other.....	.....	.....	4,042
Pineapple Juice.....	.....	.....	78,593
Beeswax	pounds.....	32,111	10,061
Honey .....	.....	.....	57,450
India Rubber, crude.....	pounds.....	6,233	5,993
Molasses	gallons.....	3,736,877	140,610
Hides of cattle.....	pounds.....	1,094,544	133,632
Wool, raw	"	439,338	71,113
Timber, lumber & unmnfrd wood..	.....	.....	36,419

Domestic products exported to Foreign Countries for the fiscal year 1913.

ARTICLES	Quantity	Value
Raw sugar	pounds.....	2,000
" refined	"	1,075,200
Coffee, raw	"	760,220
Fruits and Nuts .....	.....	276,100
Rice	"	2,000
Other . . . . .	.....	268,964
Total. . . . .	.....	\$740,284

United States Points of Hawaiian Supplies and Value.

Fiscal Years 1912-1913 Compared.

Customs Districts.	1912	1913
New York.....	\$ 4,725,151	\$ 5,567,081
Norfolk and Portsmouth.....	.....	52,980
Humboldt.....	74,423	41,562
Los Angeles.....	178,860	241,069
Portland.....	28,945	16,300
Puget Sound.....	3,604,635	3,936,221
San Francisco.....	15,778,938	20,424,606
Astoria.....	27,719	132,080

Number and Tonnage of Vessels Entering and Clearing at all Ports, District of Hawaii, 1913.

Ports.	Entered.		Cleared.	
	Vessels	Tons	Vessels	Tons
Honolulu —Coastwise.....	274	912,483	263	810,149
Foreign.....	148	595,819	150	687,335
Hilo —Coastwise.....	29	29,840	31	35,781
Foreign.....	...	.....	...	.....
Kahului —Coastwise.....	11	22,024	13	25,278
Foreign.....	2	4,889	...	.....
Mahukona—Coastwise.....	13	8,892	12	8,427
Foreign.....	1	994	...	.....
Koloa —Coastwise.....	3	1,533	6	7,010
Foreign.....	2	5,781	1	3,122
Total.....	483	1,582,255	476	1,577,102

Value Carrying Trade to and from District of Hawaii, 1913.

Nationality.	Imports.	Exports.
American.....	\$31,971,581	\$43,139,311
British.....	1,463,914	225,390
French.....	88,097	.....
German.....	546,259	641
Japanese.....	1,866,667	106,498
Norwegian.....	65,123	100
All Other.....	1,261	.....
Total.....	36,002,940	\$43,471,940

Value of Imports from Foreign Countries, 1913.

Bags	\$ 824,157	Food Supplies	\$2,326,764
Cement	20,048	Iron and Steel	107,425
Chemicals	1,594,787	Spirits	294,237
Coal	325,239	Miscellaneous	936,924
Cottons	172,244		
Fertilizers	271,706	Total	\$6,873,531

Passengers To and From Hawaii, Fiscal Year 1913.

Courtesy Board Immigration, Labor and Statistics.

Nationality	Arrivals			Departures		
	Cabin	Steer- age	Total	Cabin	Steer- age	Total
Chinese.....	266	169	435	116	813	929
Japanese.....	297	2,102	2,399	108	1,606	1,714
Filipinos.....	3	1,873	1,876	4	212	216
Koreans.....	2	11	13	3	9	12
Portuguese.....	...	276	276	...	756	756
Spaniards.....	...	2,415	2,415	...	908	908
Russians.....	...	18	18	...	106	106
Hindus.....	1	...	1	2	2	4
Porto Ricans.....	...	...	...	...	17	17
All Others.....	...	360	360	...	493	493
Europeans.....	7,513	...	7,513	6,984	...	6,984
Total.....	8,082	7,224	15,306	7,217	4,922	12,139

Nationality of Plantation Labor, July 31, 1913, and August 31, 1912.

Courtesy Bureau of Labor and Statistics, Hawaiian Sugar Planters' Ass'n.

	1913	1912		1913	1912
Americans	663	690	Japanese	24,282	26,462
Spanish	2,174	1,583	Chinese	1,126	2,318
Portuguese	4,162	4,705	Koreans	1,402	1,588
Russians	93	282	Filipinos	8,101	5,993
Hawaiians	1,040	1,538	Others	308	294
Porto Ricans	1,524	1,657			
			Total	45,875	46,930

Seating capacity of principal Churches, Halls and Places of Amusement—Honolulu.

Roman Catholic Cathedral, Fort street.....	1,500
Hawaiian Opera House, King street.....	1,000
Kawaiahao Church (Native), King street.....	1,000
Empire Theatre (moving pictures).....	930
Central Union Church, Beretania street.....	850
St. Andrew's Cathedral (Episcopal), Emma street.....	800
Chas. R. Bishop Hall, Punahou Preparatory Building.....	600
The Bijou (vaudeville).....	1,600
Ye Liberty Theater.....	1,600
Y. M. C. A. game hall.....	850

Hawaii's Annual Trade Balance, etc., from 1880.

Year.	Imports.	Exports.	Excess Export Values.	Custom house Receipts.
1880.....	\$ 3,673,268.41	\$ 4,968,444.87	\$ 1,295,176.46	\$ 402,181.63
1881.....	4,547,978.64	6,885,436.56	2,337,457.92	523,192.01
1882.....	4,974,510.01	8,299,019.70	3,324,506.69	505,390.98
1883.....	5,624,240.09	8,133,343.88	2,509,103.79	577,332.87
1884.....	4,637,514.22	8,856,610.30	4,219,096.08	551,736.59
1885.....	3,830,544.58	9,158,818.01	5,328,273.43	502,337.38
1886.....	4,877,738.73	10,565,885.58	5,688,146.85	580,444.04
1887.....	4,943,840.72	9,707,047.33	4,763,206.61	595,002.64
1888.....	4,540,887.46	17,707,598.76	7,166,711.30	546,142.63
1889.....	5,438,790.63	13,874,341.40	8,435,560.77	550,010.16
1890.....	6,962,201.13	13,142,829.48	6,180,628.35	695,956.91
1891.....	7,439,482.65	10,258,788.27	2,819,305.62	732,594.93
1892.....	4,028,295.31	8,060,087.21	4,031,791.90	494,385.10
1893.....	4,363,177.58	10,818,158.09	6,454,980.51	545,754.16
1894.....	5,104,481.43	9,140,794.56	4,036,313.13	522,855.41
1895.....	5,339,785.04	8,474,138.15	3,134,353.11	547,149.04
1896.....	6,063,652.41	15,515,230.13	9,451,577.72	656,895.82
1897.....	7,682,628.09	16,021,775.19	8,339,147.10	708,493.05
1898.....	10,368,815.09	17,346,744.79	6,977,929.70	806,675.70
1899.....	16,069,576.96	22,628,741.82	6,559,164.86	1,295,628.95
1900 (5½ mos.)	10,231,197.58	14,404,496.16	4,173,298.58	597,897.14
1901.....	24,964,693.43	29,342,697.00	4,378,003.57	1,264,862.78
1902.....	22,036,583.00	24,793,735.00	2,757,152.00	1,327,518.23
1903.....	13,982,485.00	26,275,438.00	12,292,953.00	1,193,677.83
1904.....	15,784,691.00	25,204,875.00	9,420,184.00	1,229,338.15
1905.....	14,718,483.00	36,174,526.00	21,456,043.00	1,043,340.38
1906.....	15,639,874.00	26,994,824.00	11,354,950.00	1,218,764.13
1907.....	18,662,434.00	29,303,695.00	10,641,261.00	1,458,843.48
1908.....	19,757,270.00	42,241,921.00	22,484,651.00	1,550,157.32
1909.....	22,241,041.00	42,281,777.00	20,040,736.00	1,396,379.91
1910.....	26,152,435.00	47,029,631.00	20,877,196.00	1,450,324.63
1911.....	28,065,626.00	42,666,197.00	14,600,571.00	1,654,761.34
1912.....	28,694,322.00	55,449,438.00	26,755,116.00	1,643,197.37
1913.....	37,519,620.00	43,471,830.00	5,952,210.00	1,869,513.89

Summary of Insurance Business, Ter. of Hawaii, for 1912.

From Report of Insurance Commissioner.

Class.	Amount Written	Amount. Premiums	Losses and Claims paid
Fire.....	\$ 27,131,432.65	\$ 585,292.56	\$ 47,781.56
Marine.....	71,108,910.11	320,812.82	47,911.29
Life.....	3,135,607.67	* 628,554.82	397,222.05
Accident and Health.....	.....	26,044.37	7,226.38
Automobile.....	.....	21,326.84	2,881.00
Surety and Fidelity.....	.....	26,867.36	.....
Employers' Liability.....	.....	22,319.78	1,382.35
Plate Glass.....	.....	2,260.43	387.44
Burglary.....	.....	300.65	.....
Total.....	\$101,375,950.43	\$ 1,633,779.63	\$ 504,792.07

* Of this amount \$112,863.65 is new business and \$515,691.27 renewals.

Table of Receipts, Expenditures, and Public Debt of Hawaii, for Biennial Periods up to 1894, then Annually.

(From Official Reports.)

Years.	Revenue.	Expenditures.	Cash Balance in Treasury.	Public Debt.
1860.....	\$ 571,041.71	\$ 612,410.55	\$ 13,127.52	\$ 128,777.32
1862.....	528,039.92	606,893.33	507.40	188,671.86
1864.....	538,445.34	511,511.10	22,583.29	166,649.09
1866.....	721,104.30	566,241.02	169,059.34	182,974.60
1868.....	825,498.98	786,617.55	163,576.84	120,815.23
1870.....	834,112.65	930,550.29	61,580.20	126,568.68
1872.....	912,130.74	969,784.14	56,752.41	177,971.29
1874.....	1,136,523.95	1,192,511.79	746.57	355,050.76
1876.....	1,008,956.42	919,356.93	89,599.49	459,187.59
1878.....	1,151,713.45	1,110,471.90	130,841.04	444,800.00
1880.....	1,703,736.88	1,495,697.48	338,880.44	388,900.00
1882.....	2,070,259.94	2,282,599.33	126,541.05	299,200.00
1884.....	3,092,085.42	3,216,406.05	2,220.42	898,800.00
1886.....	3,010,654.61	3,003,700.18	9,174.85	1,065,600.00
1888.....	4,812,575.96	4,712,285.20	109,465.60	1,936,500.00
1890.....	3,632,196.85	3,250,510.35	491,152.10	2,599,502.94
1892.....	3,916,880.72	4,095,891.44	312,141.38	3,217,161.13
1894.....	3,587,204.98	3,715,232.83	184,113.53	3,417,459.87
1894.....	1,972,135.43	1,854,053.08	69,225.76	3,574,030.16
1895.....	2,050,729.41	2,284,179.92	302,676.27	3,764,335.03
1896.....	2,383,070.78	2,137,103.38	315,193.16	3,914,608.35
1897.....	2,659,434.16	2,617,822.89	456,804.43	4,390,146.65
1898.....	2,709,489.12	2,299,937.57	740,280.21	4,457,605.85
1899.....	3,854,231.50	3,038,638.38	1,531,784.29	4,890,351.49
1900.....	2,772,871.87	3,727,926.28	624,471.25	4,226,374.61
1901.....	2,140,297.36	2,576,685.53	75,994.97	939,970.31
1902.....	2,473,172.81	2,382,968.90	287,131.30	1,093,970.31
1903.....	2,387,715.88	2,603,194.20	73,181.63	2,185,000.00
1904.....	2,415,356.33	2,844,054.81	56,613.29	3,317,000.00
1905.....	2,354,783.37	2,240,731.55	59,408.49	3,861,000.00
1906.....	3,320,998.90	2,512,675.89	335,331.37	3,818,000.00
1907.....	2,716,624.00	2,665,845.74	348,216.51	3,718,000.00
1908.....	2,551,522.21	2,508,001.51	391,737.19	3,979,000.00
1909.....	3,051,526.81	3,160,875.81	453,106.76	3,959,000.00
1910.....	3,641,245.35	3,435,082.87	845,218.51	4,079,000.00
1911.....	3,482,560.84	3,730,765.16	822,282.07	4,004,000.00
1912.....	3,963,588.55	4,002,483.00	2,327,844.00	5,454,000.00
1913.....	4,300,780.71	4,261,468.66	2,279,088.88	6,844,000.00

Hawaii's Bonded Debt, June 30, 1913.

Public Improvement 4½% Bonds, 1903-04.....	1,000,000
Public Improvement 4¼% Bonds, 1904-05.....	1,000,000
Refund Bonds, 1905, 4%.....	600,000
Public Improvement 3½% Bonds.....	1,244,000
Public Improvement 4% Bonds.....	3,000,000

Total Bonds Outstanding\$6,844,000

Hawaiian Sugar Plantation Statistics.

Year	Sugar.		Molasses.		Total export Value.
	Pounds	Value.	Gallons.	Value.	
1875.....	25,080,182	\$ 1,216,388.82	93,722	\$ 12,183.86	\$ 1,228,572.68
1876.....	26,072,429	1,272,334.53	130,073	19,510.95	1,291,845.48
1877.....	25,575,965	1,777,529.57	151,462	22,719.30	1,800,248.87
1878.....	38,431,458	2,701,731.50	93,136	12,107.68	2,713,839.18
1879.....	49,020,972	3,109,566.66	87,475	9,622.52	3,119,185.91
1880.....	63,584,871	4,322,711.48	198,355	29,753.52	4,352,464.73
1881.....	93,789,483	5,395,399.54	263,587	31,030.44	5,427,020.98
1882.....	114,177,938	6,320,890.55	221,293	33,193.95	6,354,084.60
1883.....	114,107,155	7,112,981.12	193,997	34,819.46	7,147,800.58
1884.....	142,654,923	7,328,896.67	110,530	16,579.50	7,345,476.17
1885.....	171,350,314	8,356,061.94	57,941	7,050.00	8,363,111.94
1886.....	216,223,615	9,775,132.12	113,137	14,501.76	9,789,633.88
1887.....	212,763,647	8,694,964.07	71,222	10,522.76	8,705,486.83
1888.....	235,888,346	10,818,883.09	47,965	5,900.40	10,824,783.49
1889.....	242,165,835	13,089,302.10	54,612	6,185.10	13,095,487.20
1890.....	259,789,462	12,159,585.01	74,926	7,603.29	12,167,188.30
1891.....	274,983,580	9,550,537.80	55,845	4,721.40	9,555,258.20
1892.....	263,636,715	7,276,549.24	47,988	5,061.07	7,281,610.34
1893.....	330,822,879	10,200,958.37	67,282	5,928.96	10,206,887.33
1894.....	306,684,993	8,473,009.10	72,979	6,050.11	8,479,059.21
1895.....	294,784,819	7,975,590.41	44,970	3,037.83	7,978,628.24
1896.....	443,569,282	14,932,172.82	15,885	1,209.72	14,933,382.54
1897.....	520,158,232	15,390,422.13	33,770	2,892.72	15,393,314.85
1898.....	444,963,036	16,614,622.53	14,537	919.18	16,615,541.71
1899.....	545,370,537	21,898,190.97	11,455	358.55	21,898,549.52
1900*.....	344,531,173	13,919,400.21	120	10.00	13,919,410.21
1901.....	690,882,132	27,094,155.00	93,820	4,615.00	27,098,770.00
1902.....	720,553,357	23,920,113.00	48,036	2,187.00	23,922,300.00
1903.....	774,825,420	25,310,684.00	10	1.00	25,310,685.00
1904.....	736,491,992	24,359,385.00	11,187	712.00	24,360,097.00
1905.....	832,721,637	35,112,148.00	26,777	1,282.00	35,113,430.00
1906.....	746,602,637	24,495,427.00	3,180	177.00	24,495,604.00
1907.....	822,014,811	27,692,997.00	6,917	355.00	27,693,352.00
1908.....	1,077,570,637	39,816,062.00	23	20.00	39,816,082.00
1909.....	1,022,863,927	37,632,742.00	728	79.00	37,632,821.00
1910.....	1,111,594,466	42,625,062.00	100	7.00	42,625,069.00
1911.....	1,011,215,858	36,704,656.00	1,801,796	89,708.00	36,794,364.00
1912.....	1,205,165,510	49,961,509.00	1,734,318	77,241.00	50,038,750.00
1913.....	1,086,439,544	36,661,277.00	3,736,877	140,610.00	36,801,847.00

* Five and one-half months to June 14. Fiscal year thereafter ending June 30.

THE reported record trip of the *Erskine M. Phelps* (listed in the ANNUALS for 1908 and 1909), as 97 days to this port from Norfolk, Va., was the time of sighting land, and requires four more to reaching port, making the actual passage 101 days to Honolulu, as verified by her log and chart.

Taxes by Division and Counties for the fiscal year ending June 30, 1913.

Courtesy of J. H. Fisher, from Auditing Department Report.

Division of Taxes.	Honolulu	Maui	Hawaii	Kauai	Total.
Real Estate.....	\$ 494,855.55	\$ 222,674.66	\$ 241,351.78	\$ 96,942.53	\$1,055,824.52
Personal Property.....	444,845.30	139,267.92	199,128.15	113,605.45	896,846.82
Bicycles and Tags.....	2,564.40	206.80	739.70	234.30	3,765.20
Automobiles.....	13,375.90	3,618.35	4,430.30	3,584.10	25,014.65
Carriages, Carts, Etc.....	11,755.00	4,520.00	8,080.00	3,690.35	28,045.35
Brakes and Sulkies	479.06	288.00	881.70	432.00	2,080.70
Road Tax.....	31,148.11	19,524.02	30,419.66	16,098.35	97,190.14
Poll Tax	15,446.02	9,728.41	15,183.92	8,032.15	48,390.50
School Tax.....	30,895.04	19,445.63	30,321.84	16,064.15	96,726.66
10% Penalty	1,779.45	393.44	518.65	29.55	2,721.09
Costs and Interest.....	5,016.82	1,308.03	1,544.28	50.30	7,919.43
Dogs and Tags.....	2,088.46	660.10	2,373.90	597.85	5,720.31
Advertising Costs.....	308.00	114.00	90.25	5.50	517.75
Income Tax	424,731.44	52,937.32	24,826.75	10,890.89	513,386.40
Special Income Tax	345,434.30	50,035.04	18,489.95	8,135.10	422,094.39
Total.....	\$1,824,722.79	\$ 524,721.72	\$ 578,406.83	\$ 278,392.57	\$3,206,243.91

Assessed Values Real and Personal Property for 1913, by races of tax-payers.

Courtesy Treasury Department.

Taxpayers.	Real Estate.		Personal Property.	
	No. Tax-payers.	Assessed Value.	No. Tax-payers.	Assessed Value.
Corporations, firms, etc.	559	\$54,827,135	663	\$71,789,014
Anglo-Saxons.....	2,623	20,296,828	2,019	2,972,598
Hawaiians.....	5,920	13,015,738	1,960	1,259,505
Chinese.....	755	1,688,510	1,679	2,443,229
Japanese.....	777	684,945	2,164	2,455,880
Portuguese.....	2,205	3,340,654	1,232	427,125
Total.....	12,839	\$93,853,810	9,717	\$81,347,351

Taxes collected for the fiscal year 1913.

Real Property.....	\$1,037,200.82
Personal ".....	915,470.52
Specific ".....	64,595.85
Personal ".....	241,442.25
Income, General.....	512,366.62
" Special.....	421,959.49
Penalties, Costs and Interest.....	12,445.53
Inheritance	19,344.00
Insurance	30,986.67
Total	\$3,255,811.75

Hawaiian Corporations, 1913.

Courtesy of Treasury Department.

Class.	Total No.	Number and Capital.				Total.
		Incorporated before and after Aug. 12, 1898.				
		No.	Before.	No.	After.	
Agricultural...	175	64	\$44,075,750	111	\$37,130,850	\$ 81,206,600
Mercantile.....	520	88	21,408,625	432	44,427,853	65,836,478
Railroad.....	12	5	7,370,000	7	9,750,000	17,120,000
Street Car.....	2	..	.....	2	1,200,000	1,200,000
Steamship.....	1	1	2,250,000	..	.....	2,250,000
Bank.....	4	1	600,000	4	1,300,000	1,900,000
Savings & Loan	11	1	1,000,000	10	620,000	1,620,000
Trust.....	6	1	200,000	5	600,000	800,000
Insurance.....	3	..	.....	3	800,000	800,000
Eleemosynary..	129	34	.....	95	.....	.....
Total.....	864	195	\$76,904,375	669	\$95,828,703	\$172,733,078

SUMMARY OF METEOROLOGICAL OBSERVATIONS, 1912-13

Compiled from U. S. Weather Bureau Records, by Wm. B. Stockman, Section Director.

(Continued from preceding Annuals.)

MONTH	BAROMETER		RAIN- FALL	REL. HUM.		MEAN TEMPERATURE					Cloud Amt.	Wind Velocity
	8 a.m.	8 p.m.		8 a.m.	8 p.m.	Max.	Min.	6 a.m.	2 p.m.	9 p.m.		
July.....	30.02	30.00	0.27	63	68	83	72	73.5	81.2	75.5	6.7	6.9
August.....	30.01	30.00	0.52	67	70	83	73	74.1	81.7	76.3	5.9	8.2
September.....	30.00	29.99	0.33	63	68	84	73	74.2	82.1	76.1	6.6	7.4
October.....	30.03	30.03	2.40	65	69	83	73	74.4	81.1	75.9	6.0	8.3
November.....	30.06	30.05	2.50	66	68	79	70	71.8	77.6	73.2	75	8.3
December.....	30.06	30.05	2.09	69	70	79	69	71.2	77.0	72.7	6.4	8.6
January.....	30.02	30.01	1.35	71	73	77	66	68.5	75.6	70.6	5.9	7.0
February.....	30.03	30.02	0.87	68	68	76	63	66.7	74.1	69.4	70	8.1
March.....	30.09	30.08	1.32	65	68	78	67	68.3	75.6	70.8	6.3	8.0
April.....	30.12	30.10	1.91	62	67	78	68	70.0	76.3	71.8	73	11.5
May.....	30.03	30.02	2.95	68	73	80	70	71.2	77.8	73.0	75	6.9
June.....	30.05	30.04	4.26	68	71	81	72	73.3	78.9	74.4	6.8	8.1
Year.....	30.04	30.03	20.77	66	69	80	70	71.4	78.3	73.3	6.3	8.1

{ 1912

{ 1913

TABLE OF RAINFALL, Principal Stations.

Compiled from Weather Bureau Reports.

Stations	Observer	1912					
		July	Aug.	Sept.	Oct.	Nov.	Dec.
HAWAII							
Waiakea	D. Forbes.....	5.61	5.29	7.34	15.83	14.84	17.45
Hilo (Town)	L. C. Lyman....	6.42	4.49	7.31	18.54	14.60	17.53
Ponahawai	J. E. Gamalielson ..	9.06	6.95	9.38	18.39	18.85	16.10
Pepeekeo	Pepeekeo Sugar Co...	5.10	7.17	5.56	15.92	13.03	17.17
Hakalau	W. F. Klatt.....	9.18	11.28	6.81	17.14	19.81	20.23
Laupahoehoe ..	E. W. Barnard..	5.48	7.74	10.02	14.18	12.15	10.47
Ookala	W. G. Lawson..	3.92	4.87	7.59	13.46	9.81	9.68
Kukaiau	T. H. Siebert..	1.85	2.89	5.32	8.19	.....	.....
Paauhau	L. Wilson.....	0.69	2.10	3.33	4.09	6.80	3.70
Honokaa	Geo. R. Sims....	0.95	2.54	3.69	4.30	7.82	3.27
Waimea	F. Pinho	2.03	1.76	1.05	0.95	3.34	1.57
Kohala	Dr. B. D. Bond	2.30	1.71	1.70	3.45	5.69	3.54
Holualoa	Jno. Gabeler...	7.42	2.62	7.18	6.52	1.36	3.80
Kealakekua	Rev. S.H. Davis	4.55	3.00	5.94	6.12	1.74	2.98
Naalehu	C. H. White....	2.07	2.42	1.09	5.91	0.59	2.36
Pahala	Haw. Agr. Co.	1.23	1.92	0.46	1.97	0.16	1.22
Volcano House..	Geo. Lycurgus..	2.91	2.77	7.20	13.26	8.51	11.99
Olaa (17 miles) ..	Olaa Sugar Co.	10.17	5.20	9.14	31.29	14.11	24.92
Kapoho	H. J. Lyman...	1.91	2.22	3.17	9.09	7.29	11.43
MAUI							
Haleakala Ranch	L. von Tempsky...	0.00	0.37	0.80	1.53	4.01	2.56
Puuomalei	A. McKibbin...	2.39	2.08	2.98	5.91	7.54	7.80
Makawao	F. W. Hardy...	0.60	0.62	2.00	3.72	4.23	3.78
Kula	Mrs. D. von Tempsky	0.82	0.70	0.94	0.60	0.00	2.36
Haiku	Mrs. L. B. Atwater ..	2.38	2.41	2.37	5.54	7.42	8.10
Keanae Valley...	Geo. Groves....	10.96	10.91	9.17	21.12	20.19	40.43
Nahiku	C. O. Jacobs....	5.84	10.11	5.08	19.60	11.58	20.52
Wailuku	Bro. Frank.....	0.98	0.42	0.24	0.90	1.29	1.58
Hana	Geo. O. Cooper	2.66	2.91	1.82	5.73	3.47	3.45
OAHU							
Honolulu	U. S. Weather Bureau	0.27	0.52	0.33	2.40	2.50	2.09
Kinau Street....	W. R. Castle...	0.32	0.63	0.32	2.85	2.99	2.80
Manoa	C. S. Desky....	2.83	4.16	2.54	7.76	7.35	5.82
Nuuanu Ave.....	S. Mott-Smith..	.....	1.24	0.92	4.38	2.56	4.30
Electric Lt. St..	A. Walker	3.45	5.85	2.85	11.49	8.93	12.51
Luakaha	L. A. Moore....	9.24	9.37	4.65	15.74	12.88	16.96
Waimanalo.....	A. Irvine.....	1.59	2.77	0.64	1.57	2.80	3.75
Maunawili.....	Jno. Herd.....	3.54	5.65	2.32	5.34	4.39	6.68
Ahuimanu.....	H. R. Macfarlane..	3.37	6.49	1.65	6.61	5.07	5.41
Kahuku.....	W. T. Vorfeld..	2.05	1.78	0.69	1.83	0.89	2.75
Ewa Plantation..	R. Muller.....	0.09	0.40	0.02	0.93	1.16	1.20
Schofield Brks..	Jno. S. King....	0.86	2.04	1.10	1.74	1.41	7.04
Waiawa.....	A. Lister.....	1.42	2.37	1.28	3.87	3.70	9.35
Waimalu.....	Hon. Plan. Co.	0.56	1.64	0.66	2.78	3.81	5.90
KAUAI							
Grove Farm.....	G. N. Wilcox....	3.42	2.49	1.45	3.06	2.11	4.42
Kealia	Makee Sugar Co.	1.45	1.71	0.69	1.35	1.41	5.14
Kilauea.....	L. B. Boreiko...	7.71	3.16	2.46	3.82	2.61	6.57
Eleele	McBryde Sugar Co...	0.83	0.84	1.42	1.63	1.19	3.29
Kukuiula.....	F. L. Zoller....	0.00	1.35	0.05	1.55	3.30	3.80
Waiawa	G. Andreson ..	0.55	0.22	0.09	1.60	0.15	1.33

Throughout the Hawaiian Islands, 1912-1913.

By Wm. B. Stockman, Section Director. Continued from last Annual.

Locality	Feet Elev.	1913						
		Jan.	Feb.	Mar.	April	May	June	Year
HAWAII								
Waiakea.....	50	31.01	6.06	6.78	11.91	5.74	10.67	138.53
Hilo.....	100	33.63	5.76	8.90	11.72	5.46	12.52	146.88
Ponahawai.....	500	29.94	4.59	8.56	15.04	8.47	13.46	158.79
Pepeekeo.....	100	31.86	5.70	6.14	9.67	7.74	7.86	132.92
Hakalau.....	200	32.34	4.95	6.70	12.32	7.49	9.73	157.98
Laupahoehoe.....	100	2.86	9.62	5.92	9.85	6.72	8.50	103.51
Ookala.....	400	10.07	7.43	5.16	10.24	7.30	6.20	95.73
Kukaiiau.....	250	6.11	4.28	4.00	7.77	5.35	4.35	.....
Pāhūhau Mill.....	300	2.06	2.93	1.80	6.22	2.92	2.92	39.56
Honokaa.....	470	2.41	4.57	2.33	5.83	4.11	2.55	44.37
Waimea.....	2720	0.96	2.72	1.31	2.17	5.11	2.84	25.81
Kohala Mission...	521	2.45	4.18	1.98	4.42	4.95	6.12	42.49
Holualoa.....	1350	4.05	1.75	1.88	4.41	10.30	11.15	62.44
Kealahakua.....	1580	5.87	1.16	3.10	7.24	8.36	11.62	61'68
Naalehu.....	650	7.07	2.47	1.42	0.45	5.88	3.20	34.93
Pahala.....	850	4.84	3.58	0.60	0.10	7.71	3.10	26.89
Kilauea Crater...	4000	17.27	1.92	4.95	8.39	7.47	3.36	90.00
Olaa, Puna.....	1530	29.23	5.14	5.90	15.97	1.05	10.69	162.81
Kapoho.....	110	20.48	4.65	3.22	5.13	8.71	4.01	81.31
MAUI								
Haleakala Ranch..	2000	0.97	1.89	0.83	3.58	3.72	1.78	22.04
Puuomalei.....	1400	2.93	5.14	4.03	12.54	4.12	4.15	61.61
Makawao.....	1700	2.06	2.84	2.12	6.06	4.06	1.74	33.83
Erehwon.....	4000	1.43	1.19	2.21	1.70	5.85	4.44	22.24
Haiku.....	700	3.44	2.84	4.02	10.66	6.53	2.68	58.39
Keanae.....	1000	15.99	11.97	11.93	31.07	9.69	11.84	205.27
Nahiku.....	700	21.18	9.23	8.48	15.99	11.31	12.52	154.44
Wailuku.....	250	0.45	5.13	1.35	2.13	5.80	0.58	20.85
Hana.....	145	6.80	3.46	1.92	4.99	7.29	4.14	48.64
OAHU								
U. S. W'th'r B're'u	108	1.35	0.87	1.32	1.91	2.95	4.26	20.77
Kinaiu Street.....	50	2.18	0.90	1.63	1.09	3.42	5.20	26.33
Woodlawn.....	300	3.51	4.29	6.24	11.30	6.38	7.45	69.63
Nuuanu Avenue...	50	3.17	1.06	2.20	5.53	3.85	5.88	.....
Nuuanu Elec. St'n	405	6.42	2.25	5.99	14.00	8.92	7.98	90.64
Nuuanu Wat'rWk's	850	10.19	6.04	12.41	13.07	6.43	13.93	130.91
Waimanalo.....	25	3.46	5.58	3.82	1.19	6.13	5.86	39.16
Maunawili.....	250	7.83	7.79	6.87	4.41	7.95	8.29	71.06
Ahuimanu.....	350	5.42	5.46	6.67	2.23	6.51	9.72	64.61
Kahuku.....	25	2.72	3.45	2.95	1.30	2.72	6.21	29.34
Ewa.....	50	0.43	0.83	0.67	0.50	3.08	3.01	12.32
Leilehua.....	990	3.61	2.17	1.61	2.66	6.77	5.58	36.59
Waiawa.....	675	4.08	1.36	4.46	5.33	6.15	8.88	52.25
Ewa.....	200	2.86	1.45	1.96	2.72	4.67	5.06	34.07
KAUAI								
Lihue.....	200	2.65	4.85	4.62	2.58	6.93	5.08	42.76
Kealia.....	15	0.73	2.61	4.39	1.38	1.74	3.88	26.48
Kilauea.....	342	3.17	4.51	2.96	2.93	5.26	4.03	49.19
Eleele.....	150	0.95	2.15	0.39	1.04	6.30	4.62	24.65
Koloa.....	100	2.02	3.00	0.59	2.15	6.71	5.92	30.44
Waimea.....	30	1.81	1.58	0.00	.00	3.73	2.21	13.27

RULERS OF HAWAII: THEIR BIRTH, ACCESSION, LENGTH OF REIGN, ETC.

(Compiled for the ANNUAL from the best recognized authorities.)

Name.	Time and place of Birth.	Began to Reign.	Age on Acc'n.	Date and place of Death.	Age.	Length of Reign.
Kamehameha I.....	Nov. —1737, in Kohala.....	—1782.....	45 yrs.	May 8, 1819, in Kaiiua.....	81 yrs. 6 mos.	37 yrs.
Kamehameha II.....	—1797, in Hilo.....	May 8, 1819.....	22 "	July 13, 1824, in London.....	27 "	5 " 3 mos.
Kamehameha III.....	Mar. 17, 1813, in Keauhou.....	1 Mar. 17, 1833.....	19 "	Dec. 15, 1854, in Honolulu.....	40 " 9 "	21 " 9 "
Kamehameha IV.....	Feb. 9, 1834, in Honolulu.....	Dec. 15, 1854.....	20 "	Nov. 30, 1863.....	29 " 9 "	8 " 11½ "
Kamehameha V.....	Dec. 11, 1830.....	Nov. 30, 1863.....	33 "	Dec. 11, 1872.....	42 "	9 " 11 days.
Lunalilo.....	Jan. 31, 1835.....	2 Jan. 9, 1873.....	38 "	Feb. 3, 1874.....	39 "	1 " 25 "
Kalaka'ua.....	Nov. 6, 1836.....	3 Feb. 12, 1874.....	37 "	Jan. 20, 1891, San Francisco.....	54 " 2 "	16 " 11¼ mos.
Liliuokalani.....	Sept. 2, 1838.....	Jan. 29, 1891.....	52 "	Deposed Jan. 17, 1893.....		2 " nearly

1 Following a period of regency, from June 6, 1825, under Kaahumanu and Kalaimoku, during his minority.

2 3 Elected by vote of Nobles and Representatives.

HAWAIIAN GOVERNMENT CHANGES SINCE THE MONARCHY.

Form.	Date Effectd.	Ruler.	Office	REMARKS.
Provisional Government...	Jan. 17, 1893.....	Sanford B. Dole.....	President.....	Till change to a Republic, July 4, 1894.....
Republic of Hawaii.....	July 4, 1894.....	".....	".....	Till Annexation, with United States, June 14, 1900
Territory of Hawaii.....	June 14, 1900.....	".....	Governor.....	Resigned November 23, 1903.....
	Nov. 23, 1903.....	Geo. R. Carter.....	".....	" August 15, 1907.....
	Aug. 15, 1907.....	Walter F. Frear.....	".....	".....

OUR FORTIETH ANNIVERSARY.

IT IS something to be in touch with the development and commercial progress of a country for forty consecutive years, as has been the privilege of the Hawaiian Annual in Honolulu, and those the most progressive years in its history. So gradual have been the developments that participants fail to appreciate the importance or magnitude of the changes transpiring till awakened to a realization of the fact by the wonderment of returned kamaaina, or surprise of charmed visitor, at the progressiveness of this crossroads city of the Pacific. Admitting the truth of this tendency, it is well to pause awhile and, looking backward, note the steps of our progress from the depressing if not critical political and commercial period that marked the close of Kamehameha rule up to the present time of unparalleled activity in all lines of civic, agricultural, commercial, educational and military endeavor. This fortieth anniversary of the Hawaiian Annual is an opportune occasion for such a retrospective duty, ample material for which may be found in its own records.

RETROSPECTIVE.

Of the business firms established in Honolulu in 1875, sixteen cards appeared in support of our first number, four of which firms are yet with us and have been continuous—all now corporations,—and two others that have changed to successors' names. Of the men composing these houses at that time, but two are, like the writer, in business harness, and of the various co-laborers and contributors to our early issues but one remains.

The principal houses then doing business in this city that have continued unchanged in name—save becoming limited corporations in most cases—are H. Hackfeld & Co., C. Brewer & Co., Bishop & Co., Castle & Cooke, T. H. Davies & Co., E. O. Hall & Son, Hoffschlaeger & Co., and F. A. Schaefer & Co., to the management and directorship of which younger generations have succeeded, save in the last named. That the mantles of responsibility have fallen on worthy shoulders is evidenced by the enterprise and solidity of Honolulu's mercantile concerns, and the advancement of the various agricultural, commercial and manu-

facturing interests they represent, as well as progressive civic and philanthropic measures with which they are closely identified.

Referring back to the activities of Honolulu of forty years ago it is difficult to realize the diminutiveness of things compared with its volume today. The commerce of the port shows this in an unmistakable manner.

TRADE CONDITIONS OF 1875.

Reviewing trade conditions we find that the total imports of the Islands for 1875 amounted to but \$1,505,670, and our total exports for the same year reached \$2,089,736, including the catch of Hawaiian whalers. The customs receipts for the year was \$213,447. The whaling fleet had not been entirely annihilated, though sadly reduced two years later, yet but 183 vessels of all classes—naval, merchant and whaling—entered at all ports of the Islands that year. The coasting fleet comprised 51 vessels, though of but 7,376 total tonnage, and we could boast of but one inter-island steamer in the lot, the first *Kilauea*, of 414 tons. Nowadays steamers are in the majority, several of over 1,000 tons in the fleet, the last of which takes the name of the first.

Our main industry then, as now, was sugar, the exports of which for that year were 25,080,182 pounds, the product of some forty-five plantations and cane growers of that period, none of them of present day average, nor mill or boiling house efficiency. Rice was second in importance; the remainder, though small in volume, showing a greater variety of domestic products than do recent custom tables. Save for the touching en route of the Australian line of steamers monthly, to and from San Francisco, our business dealings with that port, which comprised more than all other ports combined, as today, was dependent upon sailing packets. They served also for passenger accommodation and mail opportunities, oftentimes weeks apart in arrival. Such conditions did not encourage much tourist travel, but 850 passengers arriving during the year, with 654 departures, while those in transit to and from the colonies numbered 1,707. The passenger movements last year (1913) were 15,306 arrivals and 12,139 departures, without record of transport movements.

Honolulu's population at the advent of the Annual was about

14,000 (the census of 1878 placing it at 14,114), while for the whole Islands the total number was but 57,985, being 738 less than the preceding census of 1872. The revenue of the country was naturally in accordance. The biennial taxes for 1874-6 were \$318,791, while the total government revenue for same period was \$1,008,192, and the expenditures \$919,357, showing we were living economically within our means.

RECIPROCITY SECURED.

When the first Annual went to press steps were in progress (for the fifth time) to secure a treaty of reciprocity with the United States, Hons. E. H. Allen and H. A. P. Carter being the commissioners sent to Washington on the important mission which in due time was successfully negotiated and duly ratified August 14th, 1876, going into effect the month following. This gave new life to the sugar industry and an impetus in all lines dependent thereon. Business throughout the Islands revived in a marked degree.

IMMIGRATION ACTIVITY.

Movements for immigration from various foreign fields were inaugurated, with satisfactory results attending the introduction of Portuguese, and partially so with Norwegians and Germans. An influx of Chinese occurred in 1880. A sprinkling also of South Sea Islanders was secured by the government which proved costly and unsatisfactory, ranging as they did from 1878 to about 1885. The Japanese movement was inaugurated in 1884. Recent years have added Koreans, Spaniards, Russians, Porto Ricans and Filipinos. The determined effort to build up our population and secure needed labor for the industries of the Islands has been maintained at great public expense despite many discouragements. Annexation terminated the admission of Chinese into the Islands, and in more recent years treaty stipulations placed timely restrictions on the Japanese invasion of Hawaii, and of California by way of Honolulu. Hence the effort to obtain Europeans in conformity with legal requirements, resulting in renewed Portuguese immigration of the agricultural home-making class.

AGRICULTURAL DEVELOPMENT.

The development of the sugar industry may be found by the table of export values on page 32. That for 1875 was \$1,228,573. The year of annexation, 1900, found it reach some \$20,000,000, and scoring \$50,038,750 in 1912. Coffee exports in 1875 were 165,677 pounds; this has now reached over 2,000,000 pounds. Rice has more than doubled, besides meeting an increased local consumption. Fruits have taken a prominent place in domestic exports; bananas, which in that year are credited with 10,518 bunches, now show over 200,000, while the few boxes of pine-apples of 1875 has leaped to 360,000 cases of canned product and \$50,316 of the fresh fruit. Sundry articles in the table of domestic exports of that period are now unknown, the newer items of sisal, tobacco, aviary products, ohia and other forest woods taking their place.

BANK FACILITIES.

We should not fail to recognize the growth of Honolulu's monetary institutions and their stable condition as important factors in the Territory's development and progress.

The bank of Bishop & Co. had reached its seventeenth anniversary at our advent, and up to 1885 it was the only commercial and savings institution of the Islands. The second to establish was that of Claus Spreckels & Co., now the Bank of Honolulu, Ltd. The Bank of Hawaii, Ltd., was next in order, incorporating the latter part of 1897 with a cash capital of \$300,000. Following annexation the First National Bank of Hawaii established, beginning business October 1, 1900, and besides its regular commercial features it is the depository in these Islands of the United States government.

The Yokohama Specie Bank of Japan has had a branch bank here for a number of years past, recently erecting a fine two-story fireproof structure as its permanent home, corner of Bethel and Merchant streets. In 1912 a Chinese savings bank incorporated, with a capital of \$10,000. Another Japanese bank incorporated this year (1913), with a capital of \$200,000. Honolulu also enjoys the facilities and conveniences of five trust companies. Besides the above monetary institutions of this city, the principal

towns of Hawaii, Maui and Kauai have established banks, all within the past fifteen years.

From a recent published table of bank business, the aggregate deposits at the close of 1911 for the seventeen banks established throughout the Islands were \$18,189,135, of which \$12,667,162 was commercial and \$5,521,973 was savings. For the fiscal period report of 1913 these figures were slightly modified, the total being \$17,026,297.

INSURANCE GROWTH.

Among the evidences of Honolulu's substantial advancement during the life of the Annual may be noted the great increase in the insurance agencies established here and the volume of business annually transacted. In 1875 there were twelve agencies representing nineteen life, fire and marine insurance companies, all of them foreign corporations. The last Insurance Commissioner's report issued shows ninety-five insurance companies licensed to transact business in the Territory of Hawaii at the present time, covering fire, life, marine and miscellaneous, but one of which is a local organization. There is no record available of the annual amount of this class of business at our outset, but the recent published summary of insurance business transacted in 1912 showed \$101,375,950 to have been written, with \$1,633,779 as the amount of premiums paid, of which \$1,118,088 was new business and \$515,691 was renewals. All losses and claims paid for the year amounted to \$504,792.

OUR FIRE FIGHTERS.

The fire department of Honolulu up to 1893 was wholly a volunteer service. In 1875 it boasted of three hand engines and one each hook and ladder, and hose company, with 255 members all told. The engines gradually gave place to steamers, and in the year first mentioned it became a paid department. With the growth of the city we are changing from animal power for the apparatus to the more modern motor power with Seagrave combination chemical engines and hose wagons, for greater efficiency. Six fire companies are maintained, situate at different convenient parts of the city, under the supervision of a chief and one assistant, and a force of forty-four men.

THE PRESS.

An interesting feature of community progress may be gathered from the number, character and nationalities of the periodicals of this Territory. The one monthly of that time, the venerable *Friend*, the oldest paper in the Pacific, now enjoys three monthly contemporaries—the *Church Chronicle*, *Paradise of the Pacific* and *Mid-Pacific Magazine*. Two weekly papers that served Hawaiian readers in 1875 have doubled in number and for several years past finds Hilo a point of issue for one of them. The two English Honolulu weekly rivals for popularity of that period, the *P. C. Advertiser* and *Hawaiian Gazette*, have become one and the same, but meeting the growing needs of the Territory, one as a morning daily and the other as a semi-weekly. Besides a formidable rival in afternoon service and semi-weekly issues of the *Star-Bulletin*, one other contemporary adds weekly variety and spice for English readers. Wailuku, Maui, and Hilo, Hawaii, each enjoy two weekly papers. Kohala also issues its *Midget*, and Lihue, Kauai, produces its *Garden Island*. For other nationalities there are two Chinese tri-weeklies, four Japanese dailies and one monthly, with two Portuguese and one each Filipino and Korean weekly in this city. The rise and fall of other would-be “defenders of liberty,” etc., in the interim would make a formidable list.

RAILWAY DEVELOPMENT.

An important factor in the commercial development of Hawaii during the Annual's existence is the establishment and influence of railroads in promoting enterprise. The pioneer in this endeavor was the Kahului-Wailuku railroad, on Maui, in 1879, by Capt. T. H. Hobron, extending the following year to Hamakuapoko, with terminal at Paia. This line has recently completed an extension to Haiku, to serve the new agricultural projects and homesteads of that section.

The Kohala railroad, on Hawaii, was the second to establish, connecting the several plantations existing with Mahukona, its shipping point, a distance of some twenty miles. This road was the enterprise of S. G. Wilder, in connection with his steamship company.

The factor par excellence of increasing products, land values and public revenues is the Oahu railroad, which inaugurated through the energy and enterprise of B. F. Dillingham in 1889, to develop the Ewa district, subsequently continuing around to Kahuku, serving Waianae and Waialua en route. This road was directly instrumental in starting new sugar plantations and other agricultural enterprises, notably the Ewa, Kahuku, Oahu and Honolulu plantations, and enlargement of Waialua, and has materially aided the development of the Wahiawa colony and its pineapple industry. Some idea of the growth of wealth already attained thereby may be judged by the tax assessment values of real and personal property for the districts of Ewa and Waianae in 1888, when the road was first planned, which was \$1,064,217, and for Waialua \$612,861. For the year 1912 the assessed value of real and personal properties in these same districts, through the plantations and industries established therein, was \$26,151,960, while the year's traffic of the railroad at its last annual report, June 30, 1913, was 1,071,062 passengers, and 660,308 tons of freight, giving gross earnings amounting to \$1,330,215.81.

Another important road with great possibilities, and last established, is the Hilo railroad of Hawaii, also the enterprise of Mr. Dillingham, which opened for traffic in 1902, running from Hilo to Puna and Olaa, to within nine miles of the volcano. At this writing the Hamakua section of the road has been completed and opened for daily traffic to Paauilo. Southern Hawaii, as also leeward Kauai, are in possession of short railroad facilities.

STREET CAR SERVICE.

The above naturally leads to the changes that have transpired in the street traffic of the metropolis. We smile nowadays at the mention of Honolulu's first street car service by the Hawaiian Tramways Co., an English concern, which began in December, 1888, with mule power, and accommodating trains traversing three of our main streets. We rejoiced at their advent, but soon tired of the go-as-you-please system, and hailed with delight the advent of the Rapid Transit Co., a local corporation with electric power, up-to-date service that compares favorably with similar systems in mainland cities; and, further-

more, it reaches out in various directions to make possible the upbuilding of our suburbs, of which College Hills, Kaimuki and upper Nuuanu are notable examples.

Autos have largely superseded the public hack service of forty years ago (then termed "expresses"), the introduction of these modern vehicles dating about 1900, and so general have been their adoption that the number licensed for this city now nears the 1,500 mark.

ELECTRICAL.

The benefits and conveniences of electricity in Hawaii are all within the Annual's lifetime. The telephone service under the Bell system was introduced and came into use here in 1880, quickly meeting with general adoption, not only in this city and around Oahu, but installed also on the other islands. Honolulu has kept pace with the improvements that have developed in this public convenience, the latest being the adoption of the Automatic system, and few are the dwellings that are not in touch with central.

Maui had a telegraph line prior to the telephone, but the latter gradually won its place. The electric lighting of the streets of Honolulu superseded gasoline lamps in 1888. Wireless telegraphy came into use between the islands in 1891, and Hawaii came into daily communication with San Francisco by completion of the Pacific Cable at the close of 1902, extending to the westward the following year, and our wireless stations are so well equipped that daily service is now had with San Francisco, and in addition are establishing one of the most powerful plants in the world.

POSTAL FACILITIES.

Twenty-four postoffices sufficed to serve the needs of the Island communities in 1875, with its population of nearly 58,000. At the time of annexation, June, 1900, these offices had increased to sixty-eight, whereas today the list comprises no less than ninety to meet the demands of our 200,000 cosmopolitan population. Not only have the number of offices thus increased, but also the volume of business of each, the important addition to which was the establishment of the money-order system, inaugurated first for inter-island service in 1883, and extended to include foreign

countries within two years later. The development of this branch of the postal service gives evidence of its public convenience. Hawaii joined the Postal Union January 1, 1882.

Within the period under review was also established, July, 1886, the postal savings bank, in the days of the monarchy, which met with success eventually, with agencies at the principal offices throughout the Islands. Upon annexation with the United States this feature of the service was abolished, though a recently enacted federal law provides for the establishment of Postal Savings in offices not below the second class. This entitles the Territory of Hawaii to one each in Honolulu and Hilo which may be established in the near future.

Hawaii was in the enjoyment also of the parcel post facilities with several foreign countries at the time of annexation, which was terminated thereby. The service began March, 1899. By the recent adoption of the system as a feature of the United States domestic postal service, which inaugurated with January, 1913, its conveniences come again to Hawaii.

GROWTH OF FRATERNITIES.

Our first Annual shows a list of thirteen fraternal organizations in existence in Hawaii nei, one of which was on Maui. At the present time there are not less than forty different lodges in working order throughout the Territory, embracing the Masonic, Odd Fellows, Knights of Pythias, Elks, Moose, Foresters, Red Men, Good Templars and other orders in this city, many of them in all their various branches. Several lodges have also established on the other islands.

ANNEXATION.

And what shall we say of annexation, its causes and effects, events of which have been duly chronicled in these pages with the passing years.

Refreshing one's memory of the political unrest and instability experienced in the latter days of the monarchy which led to its overthrow and the establishment of the Provisional government; its change to a Republic, and finally merging by annexation with the United States, it stands greatly to the credit of the enterprise

of her citizens that Hawaii made the progress she did under such adverse circumstances. The strides that have been made under Territorial rule are the result of confidence in stable government behind law, invested capital and business endeavor, and indicate "what might have been," with wisdom as Hawaii's guiding star.

OF OURSELF.

Among the special papers of the Hawaiian Annual illustrative of the progress and development of Hawaii, agriculture claimed first attention, the "History of the Sugar Industry" being given in our first issue, followed by "Coffee Culture," in 1876, and "Rice Culture," in 1877. Several articles on these subjects have supplemented them, but without material additional facts. More recently have appeared "Lapsed and Possible Industries," "Cotton culture," "Attempt at Silk Culture," "Papaya Culture," "Sisal Fibre Prospects," "Pineapple Industry," "Early Tobacco Culture in Hawaii," and other briefer papers.

In commercial research, "Hawaiian Commercial Development," in the Annual for 1896, as also one two years later showing California's participation therein, and the "Internal Commerce of Hawaii," have had appreciation here and abroad. The "History of the Sandalwood Trade of Early Hawaii," "History of Hudson's Bay Co.'s Agency in Honolulu," and "Honolulu's Share in the Pacific Whaling Industry of By-gone Days" leave little else to be added thereto, and are revelations, each of them, even to those deemed well posted in Hawaiian commercial affairs.

To strengthen the regular folk lore feature much care and study has been given Hawaiian archæology, hence the contributions on "Names and Relationship," "Ancient Hawaiian Water Rights," "Bird Hunters of Ancient Hawaii," "Kapa Making," "Surf Riding," "Rock Carvings of Hawaii," "Mamalahoa Origin," "Burial Caves of Hawaiians," "Heiaus and Their Sites Throughout the Islands," "Tales From the Temples," "Ancient Hawaiian Religious Beliefs and Ceremonies," etc., as it opens up a mine of deep interest.

We would be remiss in appreciation did we fail to mention the valuable assistance rendered the Annual during these forty years. Most of the early contributors and counselors have passed

away. Others enter upon the work, but not to obliterate their labors. This is individuality. Thus do we miss each in their special line of thought that grace these pages, or have advised or suggested by inquiry many research subjects contributing to its reference value. Their work is an inspiration to the co-laborers of these later years with ever-widening demands.

The courteous aid accorded us in official and business circles and semi-public organizations in our statistical compilations and revisions is duly acknowledged, as are also the words of encouragement and support of the press in our effort to diffuse abroad reliable information pertaining to these fair Islands.

IN AND AROUND HONOLULU.

HISTORIC AND DESCRIPTIVE.

EARLY HISTORY.

HONOLULU—"Fair Haven" it was termed by its discoverer, Captain Brown, of the English ship *Butterworth*, in 1794—and the definition is not amiss. With its quiet restfulness of early days it has attracted peoples of all lands and tongues, so as to have become the cosmopolitan city of the Western sea it is, with a spirit of enterprise and progressiveness that is the marvel of all newcomers. The advantages of this "fair haven" to the traders in the opening years of civilization in the Pacific, and rendezvous subsequently for the whaleships of all nations when that industry was prosecuted with vigor, led to the recognition of its superiority over other ports of this vast ocean, and as the commercial advantages of Honolulu gained in favor it became of necessity as well as convenience the seat of government, Kamehameha and his court finally moving hither from Lahaina in 1843. Since that time its growth has been one of steady development. It has survived several critical periods in its history for the larger benefits in store for its future.

CRITICAL PERIODS.

Among the more prominent of these (to the Hawaiian mind, at least) was the expulsion of Russians in 1816, through fear of

evil designs on the port, and caused the erection of the fort for its defense which stood on the waterfront at the foot of Fort street till 1857. The critical period of the French demands of 1836, under the threatened guns of *L'Artemise*, when \$20,000 was levied from the government on short notice as a guarantee of future friendly conduct toward France, and the seizure of the fort and government buildings by Admiral Tromlin in the *Poursuivant* in 1848, and during their ten days' occupancy dismantled the fort, disrupted business in general, then confiscated the king's yacht and sailed away, are facts not forgotten; nor the period of British occupancy by Lord George Paulet in 1843, in support of unjust claims and demands of Consul Charlton and Simpson, the injustice of which was quickly disowned by Admiral Thomas and the sovereignty of the Islands restored July 31st of that year. To these mentioned political trials are to be added the dark periods in the dawning civilization in these Islands when immorality and lawlessness on several occasions mocked at authority and sought to bring all moral suasion into contempt, as in the outrage of the crews of the *John Palmer* and of the *Daniel* at Lahaina and the U. S. schooner *Dolphin* in Honolulu, as also the intrigues of Boki and sedition of Liliha under foreigners' influence. But right prevailed, and Honolulu came forth with fresh courage to maintain the motto subsequently uttered by Kauikeouli, "Ua mau ke ea o ka aina i ka pono"—the life of the land is perpetuated by righteousness.

REMARKABLE PROGRESS.

That Honolulu has made remarkable progress is readily admitted, but the degree of her advancement is best appreciated by comparison with conditions of which the foregoing are but samples. Out of a series of intrigue and political ferment, sufficient to thwart all spirit of enterprise, it is small wonder that building booms were few and far between, and improvement clubs delayed their beneficent influence till we were sufficiently appreciative of communistic coöperation.

Instead of the vast park-like appearance of Honolulu and suburbs, with its tropic foliage enriched by various introduced flowering trees and shrubs that bid fair to rival the cherry blossom season of Japan in its attractive and gorgeous setting, as now

enjoyed, the early days of Honolulu held little beyond the coconut palms, kou, milo, and hau trees along the shore and by the banks of Nuuanu. The introduced tamarind of slow growth interspersed among the dwellings in time lent its dense shade and color to the town, but as late as 1865, what was known as Kulaokahua plains—from Alapai street to Punahou—was a treeless waste. It seems hard to conceive such a condition, but it is a fact nevertheless.

To meet the growing demands of commerce and increasing population, city buildings have multiplied and enlarged, and attractive residences have spread out into valleys and over plains till the suburban hills even are claimed for their advantageous sites, all of which changes, in the successive building periods, have been in keeping with the progressive spirit of the age, hence this up-to-date character that is the surprise and delight of all visitors.

NOTABLE ATTRACTIONS.

Among the notable attractions of the city, that of climate and scenery may justly claim first mention for the equable nature of the former and the varied character of the latter, though this applies alike to all the islands, yet with an individuality to each.

A recognized authority on the subject says: "The main features of Hawaiian climate are the trade wind and the phenomena caused by the mountains." In this the local conditions affecting Honolulu are such that "the annual average temperature is 72 to 73° Fahrenheit, the minimum 54 and the maximum 88, the latter being rarely reached." Situate as it is on the lee side of the Island of Oahu, the trade wind in its health-giving ozone is tempered by the Koolau mountain range on its way over the summits and through the valleys, affording vitalizing power in marked contrast to the south wind periods.* And a notable feature not to be overlooked is the fact that even in the rare days of maximum temperature the oppression passes away with the sun's decline, and, as a rule, instead of continued sultriness are seasons of revivifying delight. Honolulu's sunlight is said to be in excess, and is one of the first things an observing stranger notices. The annual rainfall of the city ranges from 15 to 50

* July to September are the months of decided summer heat, but not of the oppression known on the mainland, and never with fatality.

inches, the average for seven-year periods being about 40, November to February being the rainy months.

The picturesque setting of Honolulu, with its nestling valleys and mountain range in the rear, charms alike all comers and naturally endears itself in the hearts of all her people. This claim upon us residents may be four-fold in its basis, covering historic incidents, traditional points of interest, scenic attractions and natural home ties. All but the latter appeal also to all visitors who naturally seek for information in connection therewith.

NUUANU PALI.

The wide fame of the pali at the head of Nuuanu Valley obtains from its scenic grandeur; its connection with Kamehameha's conquest of this island and the scene of his final battle, where the forces of Kalanikupule leaped to their death in their futile defense of Oahu. This decisive battle by which Kamehameha became conqueror of the group took place in May, 1795, and though it is but a memory of the past—a tradition—yet the event claims the pilgrimage of many visitors from year to year, all of whom are alike charmed with the complete surprise experienced at the rare and grand scenic view at the pali gap which opens up suddenly, revealing the majestic blue palis of Koolau receding in the distance, with its rolling plains some 800 feet beneath, now a living verdure of cultivation, and the bright waters of the Pacific beyond. This is a picture of which one never tires, no matter how familiar it may become through frequent visits.

WAIKIKI.

Another point of special attraction is Waikiki, with its seabeach and surf-bathing allurements and hotel conveniences, and the restful atmosphere of its homes mid palm groves and other tropic growth so fittingly sung by Daggett in the closing stanza of his poem thereon:

“O Waikiki! O scene of peace!
O home of beauty and of dreams!
No haven in the isles of Greece
Can chord the harp to sweeter themes;
For houris haunt the broad lanais,
While scented zephyrs cool the lea,
And, looking down from sunset skies,
The angels smile on Waikiki.”

The hostelries erected to meet the public demand for accommodation at Waikiki are at localities affording patrons the best bathing facilities along its sandy beach, the guarding reef some distance from the shore assuring safety even to the young and inexperienced. Bathing may be indulged in at all hours in waters that reflect back the bright hues of the tropic sky, whose temperature at once fascinates and constrains one to frequent indulgence.

This charm of Waikiki was known to the ancient Hawaiian. Kings of Oahu before Kamehameha's regime held court here, with temples of their heathen worship in near proximity; kings and queens of later times maintained favorite residences amid its seductive groves for relaxation from the cares of state, and traditional history tells of many important contests, including swimming and surf-riding, in its waters before a vast concourse of people from all parts of the island. Surfing was a favorite pastime of the aliis, and Waikiki was famed as one of the choice localities for their sport. Here Kaahumanu sported in its waves, and Paki—the giant chief he was—rode his surf-board with skill and grace.

Visitors may now witness or participate in this exhilarating pastime almost daily under direction of skilled canoeists, or riders of the surf-board, and so general has been its adoption by the foreign element of Honolulu that not a few experts have developed among both sexes, some following it professionally. The Outrigger Club, the Ladies' Auxiliary, as also the Hui Nalu Club, all formed to foster this peculiarly Hawaiian pastime, have grown to their full strength of membership from the attractions and health-giving qualities of this resort.

KAPIOLANI PARK.

Some little distance beyond the hotels of Waikiki is Kapiolani Park, a vast tract set aside about 1875, originally for sporting events, with allotments to its subscribers of lots along the shore and the upper or Diamond Head side of the property. Annual races used to be observed here on Kamehameha Day, June 11th, for many years under royal auspices and jockey club management. For several years past this was discontinued until in 1912

a disposition to renew the racing feature revived. The park until this year (1913) was under the care of three commissioners, appointed by the governor. It is now cared for by the city fathers and is the attractive driveway for all vehicles; the contest ground for outdoor sports, and the breathing place for the city's populace. At one place, adjoining the aquarium, the city government secured the rights of private parties and assigned it for free baths and recreation.

The aquarium just mentioned is a valuable attraction of the city that should not be overlooked by resident or visitor. Its collection of fishes of these tropic waters affords an interesting study in the variety under care in the several divisions and various glass tanks with the marvelous colorings of the majority in the exhibit. Honolulu and her visitors are indebted, mainly, to two private estates for the erection of the building and outfitting it, as has been done, in the complete and scientific manner that ranks it second to the famed aquarium of Italy, at Naples. It is maintained by a nominal admission fee on all days except Saturdays—when it is free—and by the Rapid Transit Company, whose car service affords the public the means of easy and inexpensive access.

AINAHAU.

Between Kapiolani Park and Waikiki's beach section, on the upper side of the way, reached by a roadway about opposite the Moana Hotel, is the tropical Aina hau property and residence of the late A. S. Cleghorn, left by him as a conditional gift for governmental care to public use under certain restrictions as a memorial to his daughter, Princess Kaiulani, touchingly identified by Ella Wheeler Wilcox in the poem to her memory, and by Robert Louis Stevenson. Legislative action declining the gift, the property has been assigned to a more commercial public use and is added to the attractive hostelryes of the city. Apart from the distinguished royal associations of the premises and painstaking culture of the grounds in rare tropical trees and plants by one whose taste and experience ranked him foremost among our horticulturists will give it an individuality that should prove a rich heritage, for it has been looked upon for years past as one of the show places of the city.

At the opposite or northern end of the city are the Moanalua horticultural gardens of Hon. S. M. Damon, of which a more extended description is given elsewhere in this issue.

GOVERNMENT BUILDINGS.

The principal territorial government buildings of the city comprise the executive and judiciary buildings, opposite each other on King street, near the large stone church; the archives building, in the executive grounds; the Library of Hawaii, just beyond, and the Board of Health and Survey building, in the judiciary premises. Of the two first mentioned, the following brief account will meet certain inquiries:

The executive building was erected as the Iolani palace of King Kalakaua, on the site of the old one of the Kamehamehas. It is constructed of brick, with facing of cement and block concrete trimmings. Its corner-stone was laid December 31, 1879, and its completion was celebrated by a Masonic banquet December 27th, 1882. The expense of its construction and part of its furnishings was \$343,595. Its internal finishing is largely in the choice furniture woods of the islands.

Shortly after the Provisional government succeeded the Monarchy, it was assigned to the executive offices, as now used, viz.: those of the governor, secretary, treasurer, attorney-general, auditor, public works in its several departments, land office, and legislative halls for senate and representative bodies.

The judiciary building has just gone through a thorough internal transformation and refitting on fireproof methods at an expenditure of over \$100,000. This structure was one of the first concrete buildings erected in this city, the corner-stone of which was laid February 19, 1872, in the reign of Kamehameha V., and named by him Aliiolani. As reconstructed its first floor is assigned to the clerk's office, judges' chambers and rooms of the circuit courts and the assessors and tax office. The second floor is devoted to the supreme court requirements, the chief justice and associates' chambers, clerk's office, the law library, bureau of conveyances, and department of public instruction.

At present the offices of the city fathers of this municipality are somewhat separated in leased quarters. The second floor

of the McIntyre building, corner of Fort and King streets, serves as city hall. Here the supervisors meet; the mayor, clerk, attorney and deputy, auditor, road and other departments have offices, while the treasurer has quarters in the Kapiolani building, on Alakea street. The police court and station occupies the building erected for its purpose in 1886, on Merchant street, at the foot of Bethel.

FEDERAL OFFICES.

Until the long-contemplated federal building is constructed, the various federal offices are well distributed in the city. The post-office continues at the corner of Bethel and Merchant as under earlier governments since its erection in 1870, for this purpose mainly, though of recent years its requirements have outgrown its limitations and transferred its money-order, registry and parcel-post divisions into the adjoining McCandless building, on Bethel street. The custom house, also an inheritance through annexation, continues its exacting business at the same old stand on Fort street, corner of Allen, with the offices of the U. S. Public Health service in the adjoining building.

Owing to the alterations of the judiciary building already mentioned, where the U. S. district court and its attendant offices had room, these have all located in the Model block, on Fort street, occupying the second and third floors.

The internal revenue office since its inauguration here has been located in the basement of the executive building, at the eastern end, opposite the land office. The immigration service occupies a specially constructed building for its various offices and needs, situated near the waterfront adjacent to the channel wharf. The observation station and offices of the U. S. weather bureau service are located in the Young building, not only for the registration of Oahu's phenomenon, but to which all meteorological reports throughout the territory are transmitted regularly each month. The magnetic station is located in the vicinity of Barber's Point, some fifteen miles by sea from the city, or twenty by rail.

The experiment station of the Department of Agriculture occupies an extensive tract of valley land and hill slope in the rear of Punchbowl, which is readily reached by cars to the corner of Pensacola and Wilder avenue, from which it is but a short walk.

Its offices and laboratories are located in the grounds, as also the residence of the special agent in charge, and valuable work is being done here toward Hawaii's agricultural possibilities.

The war department headquarters has its offices in the Young Hotel building, second floor, while those of the navy and engineering departments have moved to the Pearl Harbor station.

KAMEHAMEHA STATUE.

An object of historic interest not confined to local admirers is the bronze statue of Kamehameha I, of heroic size, which stands in front of the judiciary building, the particulars and description of which may be briefly stated as follows:

The statue of which this is a replica is the design of T. R. Gould, a noted artist of Boston, but executed in Florence, Italy. The original was shipped in 1880, but was lost off the Falkland Islands. Its insurance secured this one, which in due time arrived and was erected in its present position and unveiled February 14, 1883, as part of the coronation ceremonies of King Kalakaua.

The contract called for a statue of bronze eight feet six inches in height from the plinth to the top of the helmet, and was designed to be placed on a pedestal ten feet high. The feather cloak, helmet and other portions of the costume were of gold bronze. The four bronze bas relief tablets on the sides of the pedestal, included in the contract, represent important scenes in the life of the conqueror. The monument was planned to commemorate the discovery of this group by Captain James Cook.

Several years later the original was recovered, somewhat injured, and brought to Honolulu, and was purchased by the government and erected in Kohala, Kamehameha's birthplace.

TERRITORIAL EXPERIMENT STATION.

This important station, the headquarters of the Board of Agriculture and Forestry, is located on King street, south of Keeaumoku, running through to Young street, the grounds of which embrace many rare introduced trees, and afford space as the nursery for the propagation of the various trees, plants, etc., found most desirable in the reforestation work that is being carried on

in many sections of the Islands, as also in beautifying home grounds and thoroughfares.

The main building includes a room for the exhibit of the collection of woods and fruits of the Islands; a library; offices for the superintendents of Forestry and of Entomology, as also the entomologist's laboratory; insect breeding rooms, and other departments. The scope of this Bureau is to coöperate with other organizations of like character, "more particularly the Federal Agricultural Experiment Station, avoiding duplication of their work." A visit to these stations is interesting and instructive, especially so to botanists.

ROYAL MAUSOLEUMS.

The royal mausoleums, of which there are two, claim the attention of not a few visitors, who naturally seek for information thereon, which may or may not be available.

In the grounds of the Kawaiahao church, on King and Punch-bowl streets, stands the mausoleum of King Lunalilo, who reigned but one year following the Kamehamehas—1874-5—and in accordance with his expressed wish to be entombed among his people, rather than with the kings and chiefs apart from them, this one was specially constructed for his remains. The remains of his father, Kanaina, who died some years later, are also entombed here.

That of the Kamehameha and Kalakaua dynasties is situate in Nuuanu Valley, just above the cemetery, on the right-hand side of the road. What was the mausoleum, erected in 1865, in the reign of Kamehameha V, has now become the chapel, the remains of kings, queens, high chiefs and other dignitaries having been placed in distinctive vaults, embracing the Kamehamehas, high chiefs, and intimates of their day, and lastly the vault over which is erected the marble column seen from the road, containing the bodies of the members of the Kalakaua dynasty. A full account of the night ceremonies attending the removal of the coffins from the mausoleum to the new vault may be found in the Annual for 1911, pp. 105-110.

THE CHURCHES.

The various churches of the city, representing several denominations, are aggressive in their efforts to ameliorate social conditions for the uplift of the community. Apart from the regular services of each, to which residents and visitors are cordially invited (for free seats in all prevail), anniversary and special services are always full of interest to new comers. The oldest and historic church of the city is the large stone structure with square clock tower, on King street, eastward of the government building. Services in Hawaiian. This church was completed in 1842, and celebrated this last summer the fiftieth anniversary of its present pastor's (Rev. H. H. Parker) ministration.

A brief account of its construction may not be inappropriate here.

This historic church of Honolulu had its origin in a movement by King Kamehameha III and chiefs in 1835, which took definite shape at a public meeting in the early part of 1836 for its erection; size 144 by 78 feet, with basement, audience room and gallery, vestibule and tower. The king subscribed \$3,000 at the outset, and the chiefs and people contributed a like sum within a short period toward an estimated cost of some \$20,000. It is built of coral blocks cut from the reef adjacent to Honolulu. In its erection the active male members of the church, divided into five companies, worked in rotation with patience and zeal. Its corner-stone, weighing half a ton, furnished by the high chief Paki, came from Waianae. Friends in New York, Brooklyn and New London contributed nearly \$1,500, and New Haven sent its pulpit and communion table.

The corner-stone was laid June 8, 1836; the building was six years in course of construction, and was dedicated July 21, 1842.

The Roman Catholic cathedral on Fort street dates next in order. Ground was broken for this structure July 6, 1840; its corner-stone was laid in the presence of the king August 6th following, and was completed three years later, the opening services and blessing dating August 15, 1843. Its belfrey bells and organ came much later. It is built of coral blocks plastered within and without, and measures 147 by 50 feet. It was the recipient of the first pipe organ, imported about 1847.

The Central Union church (Congregational), situate at the corner of Beretania and Richards streets, though comparatively a recent structure, is the oldest foreign congregation, being the amalgamated Bethel and Fort Street churches, originally formed in 1833 and 1852, respectively, which united for more effective work following the destruction of the former in the "Chinatown" fire of 1887. This new building, of Island lava stone, was completed with its furnishings at a cost of \$127,500, and dedicated December 4, 1892.

The practical aggressive work of this church and its support of missions here and abroad has given it a fame beyond territorial bounds. Besides establishing social settlement work in two thickly-populated sections of the city, two mission stations are maintained in foreign fields.

St. Andrew's cathedral (Episcopal), established in these Islands in 1862, first occupying temporary quarters at Nuuanu and Kukui streets till the erection of their own edifice on a site near Emma Square granted by Kamehameha IV, the corner-stone of which was laid in 1867 by Kamehameha V, but through delays from various causes it was Christmas, 1886, when the chancel, the first completed section, was opened for divine worship. It is built mainly of stone sent out from England; the Davies parish house, and the Mackintosh memorial tower, adjoining, are of Waianae sandstone, which it closely resembles. Up to the annexation period the Episcopal church in Hawaii was under the jurisdiction of the Archbishop of Canterbury. In 1902 this was transferred to the supervision of the Episcopal body of the United States, dating from April 1st, since which time much activity in church and educational work has been manifest. The cost of the cathedral building is placed at \$96,000. St. Clement's, on Wilder avenue, and St. Peter's and St. Elizabeth's, in other parts of the city, are outgrowths.

The Methodist Episcopal church, corner of Beretania and Lunalilo streets, is the outcome of a comparatively recent movement which had its origin in connection with mission work of that denomination among the Japanese. After a few years in temporary quarters for their services the first church home was established on Beretania, corner of Miller street, in 1896, till, secur-

ing the present site, they erected a new edifice on most modern lines for the various branches and functions of its work and services. Its corner-stone was laid March 20, 1910, and dedicated the following year. It is of the "Mission" style of architecture, of wood frame, finished in cement stucco, at a cost of some \$35,000. In its activities it is identified with evangelical and educational work not only among the Japanese, but intimately so among the Koreans, and have recently interested themselves in the Filipinos in our midst.

The Christian Church, located on Alakea street, near King, dates from 1894, first maintaining services in Harmony Hall till completion of their present building the following year. Since establishing it has quietly aided in the betterment of the community, conducting services and supporting missions in other parts of the city. For some years past the business activities of the vicinity have been felt to be detrimental in various ways, so the property has been sold, with the view of erecting a new church in the Makiki residence district.

The German Lutheran church, located on Beretania street, near Punchbowl, dates from 1901, its dedication taking place June 2nd of that year, established for the benefit of residents and visitors from the Fatherland. Its services are therefore conducted in the German language, and classes for its study are a feature connected therewith.

The Portuguese Evangelical church established here in 1892. A neat and commodious chapel has been erected, on Punchbowl street, near the Queen's Hospital, the corner-stone of which was laid July 9th, 1896.

The Chinese Christian church, on Fort street, may be said to be an offspring of the old Bethel and the ministrations of Rev. S. C. Damon, dating from 1880, the progress of which was long watched over by Mr. F. W. Damon, as acting pastor. It is under the auspices of the Hawaiian Board, as is also the Portuguese mission.

Besides the foregoing, services of other denominations and sects are maintained in the city, as set forth in our Registry and Directory division under Places of Worship.

SETTLEMENT WORK.

Practical philanthropy is observed in the social settlement work of Palama, Kalihi, and Kakaako sections of the city, and marvelous changes are being wrought thereby, both in habitations and people, for their physical, moral and social uplift. Insanitary conditions are being remedied, milk depots established, medical attention furnished, vocational and night schools maintained, and a well-equipped gymnasium erected which affords health-giving attraction for all athletic disposed members of the community.

Much interest was manifest in the recent Public Welfare Exhibit held in the Palama gymnasium, illustrative of the conditions and needs of the lower classes, which lasted several days and had an attendance of over 6,500. The work is conducted by a volunteer body of Honolulu's public-spirited citizens, superintended by Mr. James A. Rath and a staff of able co-workers.

While the Kakaako mission mourns the loss of its capable superintendent this past year, it rallies to his memory and maintains the helpful services he inaugurated several years ago. In this vicinity has been established an industrial home for the employment of girls in the manufacture of clothing, etc., which is proving a boon to many.

SCHOOLS.

Compulsory education prevails throughout the Territory and was a recognized system of the monarchy in its establishment of constitutional government in these Islands, hence the high percentage of literacy of those Island born, Hawaiians rating with Americans and Europeans in a range of from 95 to 98%. The capital city naturally presents advantages for the maintenance of the higher grade institutions, several of which were so established, while others have attained this degree by the process of development. Our creditable educational status is readily recognized by the discerning mind, and many visitors and residents, apart from those of professional bent, are richly rewarded by a visit to the principal schools and colleges of the city.

There are thirty-two private schools of Honolulu, with 238 teachers and 5,363 pupils, and the work done among them may be said to set the pace for the public schools. All educational

work, including private, down to kindergarten grades come alike under the supervision of the department of public instruction. The public schools of the city number twenty-one, with 182 teachers and 6,918 pupils, the principal institutions being the new College of Hawaii, McKinley High School, Normal Training, Central Grammar, Royal, Kaahumanu, Liliuokalani, Pohukaina, Kaiulani, Kauluwela, with others of lower degree.

Of the private institutions of learning a higher moral tone prevails, for these include the early mission and denominational schools, with their interesting past, which may be summarized as follows:

Oahu College, for both sexes, located at Punahou, founded in 1841, avowedly for the education of children of missionaries throughout the Islands, while Christian in its character, is non-sectarian. It is a corporation managed by a board of trustees, with a president and faculty of some twenty-four teachers for the college proper, while its preparatory department, which was an added feature in 1883, has a teaching force of twenty-two. The total students enrolled in 1913 was 743. An excellent library and art gallery building has recently been erected and largely outfitted in memory of one of its graduates.

Kawaiahao Seminary, delightfully situated in Manoa Valley, had its origin as a family school for girls in 1865, primarily children of Hawaiian missionaries. So steady has been its progress, and well fitted to the needs of the community, that after several enlargements at its old King street quarters, has its present commodious building as part of the Mid-Pacific Institute. It has broadened in its scope of late years, girls of various and mixed races being now admitted.

The Kamehameha Schools, for children of Hawaiian parentage, on King street, at Kalihi, embrace the boys' manual training school and the preparatory department, on the upper side of the road, and the girls' school, on the opposite or lower side. This latter is on lines similar to that of Kawaiahao, while the former, besides its teaching up to grammar, or high school, grade is equipped for training in the various mechanical trades and farming. These schools were founded by Mrs. Bernice Pauahi Bishop—the last of the Kamehameha line—and are governed by

a board of trustees of her estate, set apart for their maintenance. In addition to the well-equipped buildings on these spacious grounds is the Museum to her memory.

St. Louis College, for boys, situated above Beretania street, the other side of Nuuanu stream (successor of the Ahuimanu College of earlier days), and the two schools of the Sisters of the Sacred Hearts, for girls, one located adjoining the cathedral, on Fort street, the other on the Waialae road, Kaimuki, are primarily for those of the Roman Catholic faith. The teaching force of these schools at close of last year was thirty-two, and the pupils enrolled were 1,182.

St. Andrew's Priory, for girls, in premises adjacent to St. Andrew's cathedral, as also the Iolani College, on Beretania street, for boys, hold the same relationship to the Episcopal denomination. The Honolulu School for Boys, at Kaimuki, an independent boarding and training school, originally the Aliiolani College, was an offshoot from the Iolani.

Mills School, the boys' department of the Mid-Pacific Institute, in Manoa, originated as a Chinese Christian boarding school, on Chaplain lane, meeting with such success as to outgrow its enlarged quarters. In its new home its scope is broadened, various nationalities being now admitted.

The kindergartens of the city, of which there are seven, are steadily growing in importance and, with the cosmopolitan character of the little tots attending, visitors at all times find much of interest.

There are also two or more Japanese schools, two Chinese, and one Korean, classed as private, for the instruction of those nationalities in their mother tongue.

BISHOP MUSEUM.

Honolulu may well be proud of the rare attraction and valuable heritage bequeathed it by Charles Reed Bishop in the Museum to the memory of his wife, Bernice Pauahi, and maintained in so highly and scientific a manner by the trustees of the Bishop Estate under the directorship of Dr. Wm. T. Brigham, enriched and enlarged by the donor from time to time. It is located in

the grounds of the Kamehameha Schools, in the northern part of the city, readily reached by the King street cars, and is free to the public, being open daily from 10 a. m. to 4 p. m., except Wednesdays and Sundays.

The Museum is especially rich in Hawaiian and Polynesian antiquities and ethnology, and in this class ranks first in the list of most noted museums of the world. The main building and wings are constructed of quarried lava rock in blocks, two stories in height, and finely finished internally in choice island woods and bronze castings. A recent addition in the rear for library, laboratory, etc., and offices of the director and staff, is of reinforced concrete. This memorial was founded in 1889, and first opened to the public in 1890.

TERRITORIAL LIBRARY.

True to the traditions of this being a well-read community, the well-equipped library and reading rooms of the Honolulu Library Association, with which is affiliated that of the Hawaiian Historical Society, fully attest. This source of literary supply and influence is located on King street, just beyond the executive grounds, a new fireproof structure specially designed for its amalgamated functions, the corner-stone of which was laid with distinctive ceremonies October 21, 1911, and under its new regime becomes the Library of Hawaii, free to the public upon registration, and open daily from 9 a. m. to 10 p. m. The building with its furniture and fixtures cost over \$127,000, toward which Andrew Carnegie donated \$100,000. It had its opening February, 1913, and had upon its shelves, at its last report, 21,309 volumes, to which additions are made at regular intervals, while its tables are regularly supplied with 154 periodicals of various kinds.

The Historical Society's Library, a department in the same building, continues the special property of its elective members, for reference purposes rather than distribution. Though dating only with 1888 for the collection and preservation of all data relating to Hawaii of historic interest, it embraces in its archives a collection of Hawaiiana and Pacific voyages and travels that compares favorably with the noted libraries of older cities.

Other reference library collections of the city embrace that of

the Bishop Museum, the Cooke Library of Oahu College, and several private libraries of more than average note.

HOTELS AND CLUBS.

Hotel accommodations of Honolulu are keeping pace with public demand, and with an individuality to each that appeals to the different tastes of the traveling public. Though under one management, the Young, Hawaiian, and Moana hotels each present rival claims for patronage, with all the service and conveniences of most modern demands, the first named more particularly so by its more recent equipment. The Hawaiian has its attractive tropical setting and restful character for so central a locality, while the Moana has its charm of Waikiki, with ocean view and surf-riding allurements, whose beach and sea-bathing attractions gain us new songs of praise daily. The Seaside Hotel, adjoining, with its cottage convenience feature, shares this popularity of location, and other hostelrys are entering the field as sites are secured, to meet the steady demand for accommodations in the vicinity.

Several other first-class hotels, more private in character, are well distributed throughout the city that meet the tastes of many patrons, of which the Pleasanton, Courtland, Colonial and Aina-hau may be said to take precedence. Commodious rooming hotels are also established in central localities, which, with the private boarding houses of the city, the various restaurants and cafes, afford visitors their choice to suit their fancy and their purse.

Mention may be made in this connection also of the established clubs of Honolulu, of which there are several. The oldest of these is the Pacific Club, situate an Alakea street below Bere-tania, in premises of its own; the University Club, in its specially designed quarters at Haalelea Lawn, and the Commercial Club, located in the McCandless block, on Bethel street, adjoining the Postoffice, all of which are active in doing honor to distinguished visitors from time to time.

RAPID TRANSIT FACILITIES.

Honolulu is credited with possessing a trolley system of street cars that compares favorably with the best of the Eastern States' cities, and by a regular ten-minute service on all lines, covering

as they do the main streets of the city and reaching out to the suburbs, the public is well and conveniently served on a five-cent fare, with privilege of transfers if required. Courteous conductors see to the comfort and safety of passengers. The cars of the service are of the latest improved type, of extra length, which, with their well-kept roads and overhead wires, affords smooth travel over the entire system.

For more rapid service, or to reach points of interest off the car routes, the public autos and hack service, of which the city is well supplied, is readily available by phone on short notice. Engagements may also be made for special, or for continual use, with experienced chauffeurs, during one's stay in the city.

HONOLULU'S INDUSTRIES.

A visit to the centers of the city's activities is essential to one's acquaintance of the town we live in, and is fraught with interest to intelligent observers, be they resident or visitor. Not all Honoluluans are aware of the importance to the progress of Hawaii that lies in the efficiency of the leading printing establishments; our iron works and foundries, the magnitude and completeness of which enable us to successfully compete for the world's work; the pineapple canneries and allied industries, the can-making concern and pinectar and juice factories.

Other minor industries are in their infancy, yet who would limit the possibilities of their importance to this isolated community in the coming years? In the one item of transforming the algaroba bean product into a valuable feed for stock, Honolulu inventive genius not only enabled a hitherto useless waste to reduce our importations of feed \$1,000,000 annually, but has led to the recognition abroad of its commercial possibilities.

BANKS AND BUSINESS HOUSES.

Little if anything need be added here to the subject of banks and bank facilities, or of the well-established trust companies, to the statements given thereon elsewhere in this issue under "Our Forty Years' Progress," but of the business houses of the city much more might be written than our limited space permits to give an adequate idea of their efficiency and up-to-dateness. Few

people arrive here but what are much impressed at the evidence of modernism in all things.

The character and size of the public buildings, hotels and business blocks indicate stability, and an acquaintance with the principal retail stores reveals a completeness in variety of latest in vogue supplies as may be found in any city of the mainland. Considering the size of the community, the stocks of merchandise carried are large, necessarily so owing to our distance from the sources of supply, and the leading dry-goods stores display the latest in all fashionable fabrics, millinery, or the etceteras of "mildady's" fancy. Of gents' furnishing goods and shoe stores there are several distinctive concerns that make a feature of recognized high-grade products. Books and stationery supplies are to be had of latest issue and vogue; furniture and household requirements are in endless variety; jewelry and art furnishings, photo galleries and supply houses, drug stores, groceries, music, and other stores that might be named, carry stocks of quality goods which would do credit to larger and more populous cities.

Besides which, of interest to many visitors, are the shopping opportunities for Oriental goods and wares, there being several concerns by both Chinese and Japanese merchants that make a specialty of the attractive products of the "far east."

THE MARKET.

A steamship captain on first touching at this port desired to visit the public market, stating that he always sized up a place by what its market presented, both in the food products arrayed and the people it gathered. The method certainly has educational advantages not only to strangers visiting, but to residents also, for the interesting character study of the cosmopolitan gathering it affords, whether as sight-seer or marketer seeking supplies for the larder. The twin market—as it may be termed—located on King street, corner of Kekaulike, is private enterprise, not of government ownership as in former years, but is under government inspection and amenable to Health authority rules and regulations. Its various stalls, while displaying a larger variety of products, perhaps, than at the old market, our friend the captain would find the entire business today in the hands of Ori-

entals, Chinese conducting the meat, poultry, vegetables, groceries and fruit sections; and the fish stalls almost entirely controlled by the Japanese, not a Hawaiian salesman in sight. The busy time of day is after the fish catch comes in and is auctioned off, usually about 10 a. m. Saturdays are naturally the busiest of the week, marketing activity occurring earlier.

OAHU RAILROAD.

Across the bridge, on King street, are the offices and terminal of the Oahu Railway and Land Co., which has grown to be a center of daily activity in both passenger and freight movements. According to present schedule (summer), no less than thirty-four trains arrive and depart daily. Of these, two passenger trains make the run to Kahuku and back, with stops at all stations en route. The Ewa local passenger trains make ten runs each way, touching at all intervening stations, and the development of the Wahiawa and Leilehua traffic requires four more. The growth of business with the Pearl Harbor naval station has increased the importance of the Puuloa station, served both ways by both the through and local trains. On Sundays an extra special is run to Haleiwa and return, making stops only at Waianae and Pearl City en route. Other trains arrive and depart with gratifying regularity and length, well freighted both ways, with occasional extras, as the passenger time tables allow.

HOSPITAL SERVICE.

The institutions of the city for the relief and care of humanity are well worthy a visit of sympathetic interest to understand and appreciate their efficiency and modern methods in practice. Foremost of these is the Queen's Hospital, founded by Kamehameha IV and Emma, his consort, and so named in her honor. It is favorably situated in spacious and attractive grounds at the base of Punchbowl, with entrance on street of that name, just above Beretania.

Leahi Home, located at Kaimuki for its pure air and dry climate, for the special care and treatment of tubercular patients, is comparatively new, yet finds ample demand upon its recently enlarged quarters and taxed to the limit of its resources, necessitat-

ing an appeal to the city fathers for aid, being mainly supported by voluntary contributions.

The Kapiolani Maternity Home, situate on Beretania street, near Makiki, is for special cases, as its name indicates, which was established during Kalakaua's reign, largely through the effort of Queen Kapiolani, and so named after her. The annual luau given to raise funds toward its maintenance is made a special feature of interest to strangers.

The Children's Hospital, on Kuakini street, Ewa of Nuuanu, is one of the latest philanthropic efforts to care for the unfortunate, and the benefit it has bestowed to little sufferers proves it to have been timely, and worthy of the endowment recently secured for its support.

The King's Daughters' Home, inaugurated by that society, is an institution supported entirely by voluntary contributions for the care of lone dependents in their declining days. It is outgrowing its present quarters on Makiki street, above Wilder avenue, and has plans in prospect for a building of its own, constructed with consideration of its special needs of comfort and convenience.

There are also Chinese and Japanese hospitals for the care and treatment of the sick and suffering of those nationalities, maintained principally by their respective countrymen.

An asylum for the insane of the Territory, without race distinction, has been maintained by the government for over fifty years. It has a retired desirable situation in the Palama district of the city, mauka of King street, in spacious grounds, with a fine large two-story building just completed, the comforts and conveniences of which had long been required.

OUR LEI SELLERS.

Hawaiians' fondness for flowers and wreath decoration of the person is responsible for the very pretty custom that predominates at steamer departures at this port in bedecking all outgoing passengers with leis (wreaths) and garlands, a vogue that appeals alike to all strangers as an appropriate and unique "bon voyage" expression. The variety of flower, evergreen, paper, seed and shell leis are by no means limited to those readily adaptable, but with a patience and skill worthy of more enduring results, the

stringing and weaving by these flower women subdue the shaggiest and stemless flowers, or other products, to marvels of symmetry and grace.

These lei vendors besiege all strangers, or departing residents, with good-natured rivalry not only at the dock, but along the streets, en route, for several blocks; their attractions are much in evidence on steamer days. On all other occasions the lei market is found along Hotel street sidewalks, from Fort street to Nuuanu, where the process of flower treatment and wreath making may be witnessed any time of day.

PLACES OF AMUSEMENT.

The city is not over-supplied with high-class entertainment opportunities. While we possess a very creditable and convenient theater of about 1,000 seating capacity, known as the Hawaiian Opera House, it has had use for some time past only by occasional talent passing through, mostly in concert role, with once, recently, a two weeks' season of Italian opera by the Lambardi Company.

Since the advent of the moving-picture business, several theaters have been erected for film and vaudeville exhibitions, of which the Liberty, Empire, and Bijou stand at the head, giving performances and matinees frequently at popular prices. These are managed by a syndicate, with attractions and talent from the Coast, occasionally furnishing the public with seasons of delight.

There are several other concerns with "movie" attractions, the business being invaded also by Japanese, besides which there is one or more each devoted to Oriental drama by and for Chinese and Japanese. Occasionally these are attended by strangers and others as a matter of curiosity rather than intellectual entertainment.

Y. M. AND Y. W. C. A'S.

Little evidence need be presented beyond that of the centrally located substantial building of the Y. M. C. A. itself of this city, corner of Hotel and Alakea streets, to the consideration felt by the community in the welfare of young men, recently completed and splendidly outfitted with all the most modern equipments for their comfort, and moral and physical improvement. This is best understood by a personal visit to its attractive rooms, embracing

office, directors' room, reading room, social hall, class rooms, gymnasium, games hall, billiard room, bowling alley, bath rooms, dormitory and cafeteria, to inspect the same and meet its corps of capable officers.

Its aggressive work in the full Y. M. C. A. spirit has to its credit the active participation in the Men and Religion Forward movement lately inaugurated.

There are Y. M. C. A.'s also of Chinese and of Japanese membership, the former established many years, the latter only recently formed.

The Y. W. C. A. of Honolulu has its rooms in the Boston building, on Fort street, and while not as aggressive as their bretheren, are nevertheless filling a much-needed niche in the community for the comradeship and comfort of an increasing body of young women coming as strangers in a strange land. In connection with its work a home is maintained on King street, of the Castle Estate, designated the Homestead, for the benefit of members and other bachelor maids.

COMMERCIAL BODIES.

Foremost in the organization for the promotion of the commercial interests of Hawaii in general and this city in particular, is the Honolulu Chamber of Commerce, a corporate body whose charter dates from June 30, 1883, though it had existence much earlier, originally forming in 1850. The Chamber has a membership of 144 as per last report. The officers consist of president, vice-president, secretary-treasurer, and a board of twelve trustees, elected annually, at which time review reports of its activities for the year are presented. It has quarters in the Stangenwald building, on Merchant street. The regular meetings of the Chamber are bi-monthly, with monthly for the trustees, and specials at the call of the president. Distinguished visitors are not infrequently guests of honor.

The Merchants' Association is a younger body, of some 200 members, a chartered organization of April 23, 1901, with officers chosen from its board of nine directors, elected annually. Its meetings are quarterly, with rooms in the Young building, where a paid secretary is in attendance to serve its members, or visitors.

with required attention. Among the objects of the Association, it aims "to assist in legislative measures for the city's welfare; the observance of laws for the safety, health and prosperity of the community; promote the attractiveness of the city; originate and aid measures for the comfort and interest of visitors, encourage travel hither and aid the production of material for manufacturing purposes and the location of new enterprises in the Territory."

FRATERNAL ORGANIZATIONS.

Few cities of the foreign community size of Honolulu can boast a larger number or greater variety of fraternal societies for the mutual helpfulness of members of their respective orders. Of these the Masons and Odd Fellows are the oldest established in the Territory, and with their various branches are of remarkable strength. Both of these orders possess prominent buildings of their own for their lodge purposes. Visiting brethren in good standing find a cordial welcome awaiting them at stated meetings to participate in fraternal fellowship.

The order of Elks, while of comparatively recent establishment here, is numerically strong, its social feature with the benevolent aims of this body appealing to many in the community. Its lodge room, in leased premises on King street, near Fort, was specially fitted for its purposes, though prospective building plans are being considered, with a central site already secured, toward which extravaganzas are made a money-making feature at our annual floral parade anniversary.

The Loyal Order of Moose has lately entered as a formidable rival in the fraternal field, with quarters for its home in the Progress block, corner of Beretania and Fort streets.

Orders of Foresters, Red Men, Eagles, Knights of Pythias—the latter represented by several lodges—and lastly the Good Templars, with others representing the G. A. R., U. S. W. V., and Sons of Veterans, are among the well-known benevolent organizations represented here, the full list of which, with their time and place of meeting, will be found in the latter part of the Register and Directory division in this issue.

SOCIAL CLUBS.

For the social amenities of life in this crossroads city of the Pacific there are several organizations especially designed to overcome the "stranger in a strange land" feeling, and at the same time foster "the tie that binds." The clannishness of Scotland's sons is borne out by the Scottish Thistle Club, which organized here in 1891 for social gatherings and mutual aid. It has its club rooms, with meetings twice a month in the Young building.

The Buckeye Club, formed in 1904 by the sons and daughters of Ohio for mutual social fellowship among the resident representatives of that state, or visitors therefrom. Its occasional and stated meetings are home socials held at the residences of members.

Besides the University Club already referred to, which, as its name implies, is composed of a membership enjoying collegiate honors, there are the Harvard and Cornell clubs of Hawaii, for the strengthening of the college spirit among their respective alumnae resident in this Territory, and to do honor to visiting sons.

Then there is the Country Club, an organization for outdoor exercise of golf, tennis, etc., with frequent social features among its members and distinguished guests at the club premises, ideally located in Nuuanu Valley, to the left of the car line terminal.

Thus in various ways, as may be seen, life in the tropics is not a *dolce far niente* existence, though the very atmosphere bespeaks a respite from the cares and perplexities of other lands.

Nor does this exhaust the subjects of interest or attraction in and around Honolulu that might be presented, but sufficient is shown, it is hoped, to help others to a better knowledge of both place and people.

THE TOWN of Honolulu was surveyed by a German engineer in the year 1845 by direction of the government, and a map drawn. Its population at that time was estimated at from eight to ten thousand, and its dimensions measured five-sixths of a mile long from Nuuanu stream to the mission premises, and two-thirds wide. It is credited at that time with 11 wholesale and retail establishments, 14 retail stores, two auction houses, five hotels, six boarding houses, five sailors' grog shops and three hospitals—American, English and French.

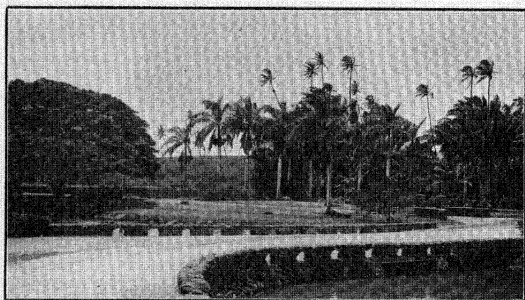
MOANALUA HORTICULTURAL GARDENS.



NOT ALL Honoluluans are aware of the rich charm and rare beauty that is being evolved for their almost unlimited pleasure on the Moanalua estate of Hon. S. M. Damon, situate on the northern confines of the city, a little over three miles distant from the postoffice, where its extensive horticultural garden is being developed with careful preconceived plan and liberal expenditure of means, the full enjoyment of which the owner shares with the community by throwing the premises open freely to the general public under certain common sense regulations. Those who do know can not but be appreciative of the ideal location and beauty of the grounds, with their natural scenic advantages enhanced by flowering and ornamental plants, shrubs and fruit trees under the directing hand of an experienced landscape gardener, rendering the general aspect picturesque by the construction of artificial lakes and rivulets, the water supply therefor from the natural flow of the valley stream being supplemented by a series of artesian wells in different parts of the estate.

A vantage point of observation is had from the main road just before descending the Puukapu hill after passing Fort Shafter. To the left, makai of the road, is the earlier work of its development, the towering coconut, royal and date palms, giving

tropic effect to a broad stretch of apparent dense foliage of monkeypod, mango and other trees, on the outskirts of which, near the line and station of the Oahu railroad, with rustic stone tower adjacent, are the Damon summer houses of Japanese and Hawaiian types. In the foreground are the water garden and well-kept, spacious lawn where is located the Carter memorial fountain. At this point in the highway the road has been raised to permit the stream in ordinary to pass through, or in times of freshet to run over, beyond which open gates and palm-lined avenues invite entrance for a season of botanic enjoyment and rare hospitality.



The main government road runs right through this property, the mauka portion of which has been transformed into a veritable bit of transplanted Japan, of which more anon.

Few visitors enjoying the benefits of the generosity here shown but what inwardly desire to learn something of its inner history. The beauties of the place make one thirst for more knowledge thereof, and considering the gratuitous sharing of it with others the interest can not be charged to idle curiosity.

It is common knowledge that the Moanalua estate came to its present owner as a devise from Mrs. Bernice Pauahi Bishop, last of the Kamehamehas and founder of the Kamehameha Schools, but this has been materially enlarged by purchase of over one hundred kuleanas and parcels within, or adjoining, the "Ahupuaa

of Moanalua," which was the property named in the will. The area of the estate is some 9,045 acres, and extends from the sea-shore up through the valley to its head, and besides embracing tracts leased for cane, and for rice and banana culture, it has its fruit orchards, horticultural and tea gardens, pleasure grounds, pasture and forest tracts, and enjoys also the ancient fishing rights belonging to the ahupuaa. Furthermore, the natural salt lake phenomenon within the walls of Aliapaakai hill is another of its assets.

In the management of this property its income is assigned for its extension and improvement.

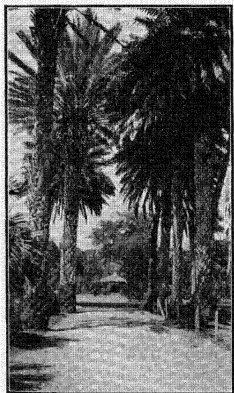
Well-constructed roads, bridges and driveways traverse the estate, affording visitors ample facilities for the enjoyment of driving through its picturesque grounds by carriage, auto or leisurely stroll.

The plans evolving for the Moanalua gardens are largely the outcome of observations during visits to England and Scotland by Mr. Damon in noting the features and management of private estates of semi-public character there met with; maintaining control to insure the proprieties while hanging the latch-string for the general public on the outside.

And in this manner it is the

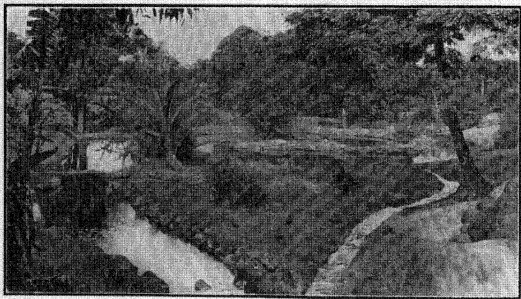
one place available for parties to enjoy a quiet outing free of possible intrusion or unwarranted molestation.

One cannot but be impressed with the scientific attention that is being given to the several features of these horticultural grounds to avoid duplication, and for the highest development of such varieties of fruit, plant and flower most desired, found suitable to this climate, and the liberal expenditure for the introduction from distant lands of tropic fruits "best by test" to be found. For this



purpose the head gardener, Mr. Donald MacIntyre, was commissioned to proceed to the Philippines, resulting in securing several of the choicest varieties of India's standard mangoes, and the three best varieties cultivated in Manila.

The fruit orchard is in the makai section just below the nursery and hot-houses, along the lower side of the main road. That portion devoted to the India mangoes comprises some five acres, the importation of which dates from 1900, and of the varieties introduced, one named Piri stands as the choicest mango known in the markets of the East. The next in public estimation is the Alfonso, then the Cambodiana, Cowasji Patel, and Mulgoba. There is also one named Tetofari noted for its remarkably large size



rather than choice quality. It is characteristic of these budded India varieties that the trees grow low and bushy, and fruit first on the lowest branches.

Of the Philippine varieties the first importation for these grounds was in 1902, a few; subsequently on Mr. MacIntyre's special mission for selection and propagation there, in 1908, he secured a liberal supply, but limited to three recognized choice kinds of those islands. There are several varieties of the chutney mango, as also other choice kinds of local cultivation, throughout the grounds, including one that traces back to Dr. Hillebrand's culture and probable introduction.

The avocado or alligator pear is also represented by a number of varieties, one of local fame being named "Moanalua," after the estate, for its distinctive choice quality. In speaking of the almost universal choice varieties of this fruit in these Islands, the gardener considered it indicated a fortunate care in their several introductions.

Mr. Damon has also devoted much care to the culture and propagation of the Smyrna and Capri figs, having after due search imported from Fresno, California, four years ago, the special insect *blastophaga*, essential for their perfection. Considerable space is assigned to this fruit in several varieties, all under wire netting as a protection against the Japanese beetle and the minah birds.

The introduction of the red banana into these Islands from Jamaica, in 1900, is to be credited to Mr. Damon, who procured them with the view of testing their commercial value. The plants grow tall and heavy, much like the Brazilian, with large full bunches of fruit, but of coarser flavor as a table delicacy, though it may have the excellent shipping qualities for which the "Bluefields" are noted. Experience in these grounds has demonstrated the Chinese banana as being the most satisfactory and profitable variety for culture and shipment. The plants grow low and compact; they fruit well and uniform, true to season (i. e., its time of maturing), and of delicate flavor. There are other bananas of Hawaiian varieties that are good equally for cooking and eating. The former claim is not a recognized quality of the China.

Grape-fruit trees intersperse the mango orchard, and coffee and oranges are also well represented in adjoining fields.

Nurseries are maintained for the care and propagation of rare plants, whether acclimatized or of recent introduction. Those devoted to ferns and palms, of many varieties, impress visitors with their delicacy and grace. Another to orchids, where rare blooms from costly imported plants from distant lands are cultivated in an atmosphere rendered artificially moist, suiting their requirement. Here some four hundred varieties are being grown in their varied natural forms.

Grapes are also grown under glass for their better protection from birds and bugs, the special kinds propagated being the Hamburg and Muscat, with some attention to a variety known as the Isabella improved.

Concrete plant frames and boxes are in the making to take the place of wood in certain divisions of the nursery for the better maintenance of conditions best suiting this plant culture, whether fruit or flower. Out in the open, between two of the hot-houses is a bed of African daisies, *Gerbera Jamesoni*, that in its prolific bloom at the time of our visit revealed in all the possible shades of red, blending down even to pure white.

On the mauka or upper side of the government road between the stream and the schoolhouse are the sunken gardens, a section of floriculture that is rich in color and filling the air with fragrance quite noticeable in passing along the highway. A profusion of flowering vines brightens the roadside, while at a little distance beds of flowers in parti-color, or grown en masse greet the senses, revealing oleanders, petunias, heliotrope, giant cannas, roses, candytuft, daisies, salvia and others, which show to advantage by contrast and harmony with the well-kept lawn adjacent.

The distant upper grounds are devoted to the Japanese Tea Garden, where torii form the gateways; arched bridges span the

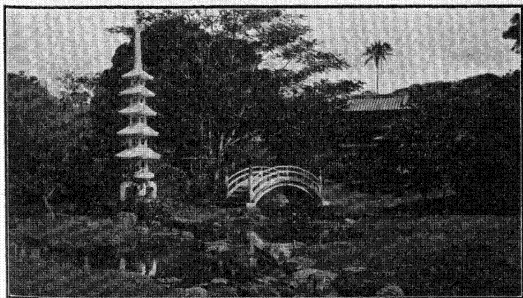


streams, stones of measured tread direct one's steps, rustic rest-houses intersect the premises, single and five-story granite lanterns (*goju no too*) lend ornamentation and lead one to the tea-house attraction, the recently constructed genuine Japanese house with its tile roof in a garden of its own within an enclosure characteristically Nipponese, all of which was secured in that land for its erection here, and furnishing in all its minutest detail a complete model of a Japanese dwelling, the history of which may be briefly told as follows:

This house is the result of the commission of Superintendent Takano to visit his country and

secure a complete Japanese house and its furnishings, and to all appearances the duty has been well executed, for in all its detail of model, material and finish, it is a faithful reproduction of a two-story dwelling of that country, the beauty of which calls forth the admiration of us western folk, while its naturalness causes steady pilgrimages of reverent Japanese in appreciation thereof.

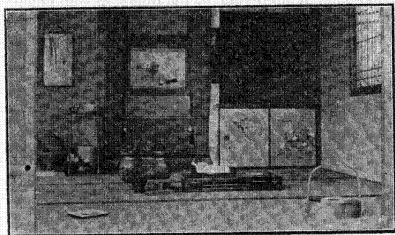
The plans and specifications were prepared in Osaka after the classic Kioto model, and every stick, stone and article of furniture for it was procured and shipped here, and upon its arrival capable hands were assigned to the task of its construction according to design in fulfillment of Mr. Damon's desire. This was no hastily-executed task, but with laborious pains to secure the detail of con-



struction, ornamentation and finish, the patient artisans spent many months.

At a distance the house is enveloped in foliage, where breadfruit, kukui, eucalyptus, algaroba, jackaranda, palms, cypress, bamboo, ironwood, hau and other trees intermingle. Near this grove the visitor comes upon a rockery whereon a full-sized bronze eagle is in natural pose, beyond which on a gentle rise the house stands. One is impressed by the oddity of the structure, and the amount of detail work on the building, fence, gate and miniature garden within the enclosure. Save for the glaze on the orna-

matting of fine texture of several thicknesses. The furnishings and ornaments are few; even chairs are absent.



Ewa-wards of the tea-house quarters is another flower garden section of considerable area, where, in addition to the variety of choice kinds cultivated in the open

ground, a large circular wire screened house is devoted exclusively to roses.

Mauka of all this, on a commanding site on the hillside known from ancient time as Puu-o-Maui, stands the recently constructed

Damon summer residence, from which a fine view of the valley portion of these broad grounds in their picturesque setting is had to advantage.



Further along the highway about a mile from the horticultural grounds, to the right of the road, passing sections devoted to bananas, mangoes, picnic grounds, etc., at the entrance of the valley proper, are the famed Moanalua pleasure grounds, the entrance to which is designated by a carved stone in its gateway, "La Belle Moanalua," where the annual inter-island polo

tournaments have been held for several years past, overlooking which are the golf links on the slope of Pukaki. The situation for this game field is ideal for both contestants and spectators, and the public-spirited generosity of its owner in maintaining this extensive estate that it may give pleasure to the general public in the several phases herein shown merits the appreciation of all classes of the community.

Beyond the pleasure grounds, on the slopes overlooking Halawa, is a stretch of country of several hundred acres in extent that of late years has had use as the maneuvering field and camping ground of the National Guard in their annual outings, as also similar use by the Federal troops, being the only available field suitable for such purpose this side of Leilehua.

HONOLULU SIXTY YEARS AGO.

A Reminiscence by THOMAS G. THRUM.

MAY 16th, 1913, rounded out sixty years since my advent in these Islands. The time has rolled by so evenly that it is difficult to realize this flight of three score years that stands to my credit in Hawaii, but the fact remains the same. Memory of that eventful day at my unexpected arrival from Tahiti seems to retain the outward impression of place and certain people more than the household joy at the reunited family circle.

On the date mentioned the British topsail schooner *Royalist*, Captain Harris, arrived from Sydney via Tahiti, with Mrs. Harris, wife of the captain; Mrs. Webster, wife of E. C. Webster, who for a number of years subsequently kept the livery stables connected with the Commercial Hotel; Walter Seal, Jas. S. Moody and myself as passengers. Both Seal and Moody had been previously at the Islands, through whom I learned much of Honolulu before arrival, including the fact of Moody's former residence and jewelry shop on King street, near the bridge, being now the Thrum homestead.

The arrival of the pilot, Captain Luce, in the early morn acquainted us with the news of smallpox being in town, supposed

to have been brought here from California some two months before. Our vessel was towed in partly by boats and partly warped in by bullocks hauling on a hawser along the eastern side of the passage, for this was before the advent of steamers for towage or any inter-island service, although the *Akamai* came soon after. My attention was taken up at this time more by the military appearance of the port with the bristling guns of Punchbowl and the then fort which occupied a large part of the present Esplanade, adjoining and extending makai of Robinson & Co.'s premises, familiarly known as "the point," abreast of which was a large Russian war vessel, the *Olecoutza*, of 20 guns, undergoing repairs, to strengthen the impression not unnatural in a boy of ten.

Prominent features of the city front comprised the old custom house, a three-story coral building that stood on Queen street, Ewa of Nuuanu; the then new market building and harbor master's office, of two stories (latterly Brewer & Co.'s), the courthouse, just finished, now a part of H. Hackfeld & Co.'s warehouse premises, and Halekauila adjoining it. The two-story coral warehouse of Robinson & Co., with its rescued figurehead of the *Alderman Wood* fixed on the gable end, gazing seaward, was a prominent landmark of the waterfront, while in the background stood out the Kawaiahao stone church, the palace, Catholic church and Bethel chapel.

As our vessel cast anchor we were boarded by "Tim" Maxwell, a shipping butcher and noted character of the time, who volunteered to take me ashore to my folks and piloted me to Emmes & Johnson's shipyard, where father was at work. Chip-flying from the process of spar-making ceased for a time while father and son renewed acquaintance after some two years' separation, after which I was conducted home by one of the native helpers of the yard, passing on the way Burdick's cooperage, on King street, Honolulu's then center of mechanic activity, and noticeable from its large size and surmounting belfry, the stated calls from which served as the workmen's town clock.

The natural route taken was by way of Marin street to Maunakea, then to King, then along the latter toward the Nuuanu stream to near the Halilimanu bridge, passing en route the bakery of Captain Mossman, the Manini, and Captain Maughn premises, and

Winship's "hale unihepa," the first brick house of Honolulu, which stood on the northwest corner of King and Maunakea, while opposite it, on the Waikiki side, was the coral store of Averberg & Co., evidently doing a flourishing business. The mauka corners held wooden buildings, one of which, on the northeast, had been a store, as also a like two-story structure on the makai side of the way that had been the mart of John Watkins & Co. Nearly opposite it was the "Fore-Top" tavern of Wm. Gill, by which a passage or lane led into premises that shortly afterward became the birthplace of the British club. The residence of Ed. Burgess stood next, then came the two-story coral building of Wm. Austin, occupied about this time by a Charlie Turner.

Adjoining the Watkins store was a good-sized vacant lot that soon afterward became the livery stable premises of Wm. Foley, of early circus and theatrical fame. Next came a bowling alley (of which the town possessed many), and the large square two-story Main Hotel building of Friel & Brown, also vacant, then a couple of low buildings before reaching the Thrum cottage. With the exception of Burdick's premises, with its hum of industry, the rest of this section of town seemed to have been deserted of the business it once enjoyed.

Shortly after arrival I was made aware of the first smallpox infected premises, on Maunakea street, by its yellow flags and being roped off across the street, compelling a party of us to go around by way of Smith and Beretania to reach the residence of Mr. Geo. J. Emmes, off upper Maunakea, just in the rear of Fay, the hat-maker. I do not recall that any other premises were so quarantined, though it was not long before the disease was prevalent in all parts of the town, so that the health authorities and the doctors were taxed to the utmost to combat it. Our house in the Kapuukolo district was soon in the midst of infection, and the piteous, dismal wail of bereaved ones in the neighborhood, day after day, told the sad story of its steady progress. Our household had occasional visits of the health authorities, termed "Commissioners of Public Health," of which Dr. T. C. B. Rooke was chairman, with personal examinations of each member of the family by Drs. Rooke, Newcomb and Lathrop, who deemed us immune, which held good save with the two eldest boys, who ex-

perienced a mild form of varioloid, not so much from the immediate neighborhood as it was our overhauling of vacated premises, with several others—police among the number—for the various parts of a model fire engine which had struck our boyish fancy, for it was afterward learned that the late occupant had that day been removed to the hospital, a two-story structure in the Kakaako district.

The frequency of the “dead cart” on the streets to receive bodies, many of them simply wrapped in mats, called for heroic work by a force of employees of the health authorities to prevent secret interments on the premises. A prominent fearless worker at this duty was a prisoner named John Robinson, known as “three-fingered Jack,” for which valiant service he was given his liberty and a goodly sum of money at the close of the siege. There was a big darky and a reckless Irishman who also did like commendable work. Call for volunteers was made early in July, and notice of impressing into service issued on the 18th. Public meetings were held in view of the increase and ravages of the pestilence, and certain parties, of whom Dr. Geo. A. Lathrop was spokesman, took this occasion to arouse public feeling against Dr. G. P. Judd, minister of finance, and Richard Armstrong, minister of public instruction, as responsible for its introduction and spread. A called meeting of citizens to consider the situation met at the courthouse, presided over by Dr. W. Newcomb. A committee was appointed, including all physicians of the city, to suggest measures to combat or overcome the disease. At an adjourned meeting, establishing hospitals, districting the city, burials, destruction of straw houses and dogs were recommended, and resolutions arraigning the government (aimed at Dr. Judd and Rev. R. Armstrong) were presented, but amid excitement the meeting adjourned without action thereon. At a subsequent meeting to discuss the matter, violent anti-missionary speeches were made by several, and resolutions carried with a memorial to the king asking dismissal of the ministers. A “committee of thirteen” sought signatures in support of the movement. A counter public meeting of Hawaiians was held a few days later at Kawaiahao church, at which John Ii presided. The foregoing resolutions were condemned in unmeasured terms, and one carried which re-

ceived 1,000 signatures, praying the king to disregard the memorial for the removal of Judd and Armstrong from office. Nevertheless, political feeling ran so high that a new cabinet was formed, with E. H. Allen in place of Dr. Judd as minister of finance. Early in September the opposition was so elated at their success that a torchlight procession was indulged in and certain residences illuminated, of which Dr. Lathrop's, corner of Fort and Beretania, and Ed. Burgess', on King street, showed special transparencies for the occasion.

Toward the end of July some forty houses at Waikiki and thirty on the Ewa side of Honolulu, two miles from town center, were being erected for the reception of patients, the Kalihi station under the care of Dr. S. P. Ford, at Mauna Pohaku, and Kulao-kahua under Dr. B. F. Hardy, and at Honuakaha under Dr. E. Hoffman, all of whose services were volunteered.

The scourge lasted along till the opening of the year 1854, the last authoritative notice being January 28th, with a total of 2,485 reported deaths out of 6,405 cases, but fortunately it had spent its severity by the time the whaleships came in for their fall recruiting, 1853, for the season was a large and busy one, not only in the result of the cruise, but in the number of arrivals, the month of October alone bringing to port no less than 110 vessels. During that season of activity—and it must be remembered it was before the days of steam tug service for the port—many days showed from three to eight or ten arrivals, and one day we had nineteen. This kept both pilots and harbor master busy finding berths for the fleet in our restricted harbor area. It was a common sight to see three vessels moored together, though this was the custom for convenience of transshipment of oil and bone, of economy perhaps, and partly of necessity from the lack of wharfage.

The success of this season doubtless strengthened local effort and interest in the whaling and Arctic trading industry which had taken shape the year before, as from the two vessels in 1853 there were six in 1854, and these increased annually for several years before the decline set in.

Among the events of interest about the time of my arrival was the presence of a Marquesan chief, who had arrived on the whaleship *Tamarlane* looking for a teacher in behalf of his people. The

spirit of "general meeting," then holding sessions, favored the appeal so that the *Royalist* was chartered and sailed just one month after my arrival in her. The mission party consisted of several Hawaiians, notably Kauwealoha and Kekela, and Mr. Jas. Bicknell, son of an English missionary at Tahiti, who volunteered as teacher. Rev. B. W. Parker accompanied them on behalf of the Board to see to their locating, etc., and returned with the vessel.



While the health conditions of the town as set forth naturally restricted one's travels, yet it did not take long to become acquainted with its principal features. Grass houses were much in evidence, though along the business streets these had mostly given way to wooden buildings, with a number of adobé and coral intervening.

The upper side of Queen street was built up to Fort street. On the lower side the buildings were scattering. Two houses at the foot of Nuuanu street were make-shifts for the water works office following the sailors' riot fire of 1852, that had wiped out the station house at this location. Between the new market building and the Charlton wharf landing was the fish market, a series of flat-roofed sheds—as I remember them—till their change to below the foundry some years later. Adjoining Jas. Robinson & Co.'s premises was the Fort wall, extending to near the court house,

beyond which was Governor Kekuanoa's residence, known in its latter years as Edinburgh House.

Work was in progress at the corner of Kaahumanu and Queen on the Makee and Anthon block, next to which was Dr. Lathrop's drug store, with Captain Tom Spencer's ship chandlery adjoining. Abreast of the market building was H. Hackfeld's store, while the corner of Nuuanu held the Punchard store, one story, coral, subsequently Nolte's "old corner." On the opposite (Ewa) corner was the old Ladd & Co. premises, a low two-story coral building with upper verandas and steps thereto from both streets. The rest of this block was mostly the Caranave premises, two-story buildings fronting Nuuanu, but some distance back from the road,



with a large two-story coral warehouse in the rear, lastly occupied by the Honolulu Iron Works and recently demolished to give place for their new structure. King and Nuuanu were the principal business thoroughfares. Fort street claimed little attention at that time. The prominent firms of that period were C. Brewer, R. C. Janion, Hudson's Bay Co., Makee & Co., H. Hackfeld, R. Coady & Co., Porter & Ogden, Melchers & Co., Doench & Stapenhorst, Swan & Clifford, Aldrich & Bishop, J. C. Spalding, and one or two others, while the popular retail stores were those of J. T. Waterhouse, Thos. Cleghorn, B. F. Ehlers, H. & W. Dickson, Frank Spencer, Geo. Clark, the French store of P. Michel, von Holt & Heuck, Averborg & Co., H. Dimond, Gulick & Clark, and

Samsing & Co. Castle & Cooke's store, at "the mission" on Kawaiahao lane, had its special patrons, as had also Mrs. H. J. Holdsworth, with her choice English household goods at her residence, Chaplain lane.

Liquor saloons were called hotels in those days, but most of them were better known as grog shops, and their predominance on Nuuanu in earlier years earned it the name of "Fid street." Fort street also had its share at this time, the better class, of which the French, above Hotel street, and the Globe, corner of King and Fort, as also the Commercial, corner of Nuuanu and Beretania, were the leading hostelries. The Canton, on Hotel street, had seen better days.

There were several characteristic features of the town that have gradually worn away. A number of the buildings had their look-outs, and not a few prominent residences had a similar convenience along their street front, from which to witness passing events, among which the Saturday afternoon horseback cavalcades, with pa-u riders predominating, was regularly enjoyed after four o'clock. All work ended at this hour and the town took on a decidedly holiday aspect.



Naturally there were some primitive habits of the people in evidence then which have been outgrown. We do not meet the Hawaiian burden-bearers nowadays trudging along with their calabashes of poi, vegetables, fowls, or pigs, etc., balanced on either end of a pole (the aumaka), carried on the shoulder, or, it may be, not infrequently, with produce only at one end and carrying a stone as its balancing companion at the other while finding a buyer.

The poi and milk vendors had their regular places of sale, certain street corners being known as "milk stand"—but only during morning hours—or "poi market," where these commodities were ranged along the curb of sidewalk, the calabashes of prepared poi

in a row ready for the buyers testing. Fancy such a range of, say, twenty or more calabashes being uncovered to tempt the marketer at his or her approach, each owner at the same time voicing forth the superiority of his umeke content, some with direct exclamations, others by the winsome oli, lauding its qualities and benefits, seen and unseen. The buyers usually tested their intended purchase, dipping their fingers into one calabash of poi after another, tasting each in succession till satisfied by smoothness and flavor the choice offering on the market.

The town crier (kuahaua) is also a thing of the past, the one to announce official proclamations during the smallpox period being a little old man with good lung power. His cries were not confined to street corners, but at intervals along the way he would shout his "E Hoolohe" (O Listen), then pour forth his announcement as he trudged along.

The waterfront presented a scene of considerable activity. The wharf area was limited to Robinson's, Market, Ladd's, Custom House, and one other occupied usually with vessels under repair. Their use by foreign vessels loading and discharging, and the movements of the coasting fleet, which though small of tonnage were more in number than we have known for many years past, kept things lively. Brigs were a more familiar sight in port than of late years, and they comprised our San Francisco packets, with the *Zoe* as the favorite, for a time, under Captain Jas. Smith, who left that same year to build and bring out the bark *Yankee*, long an island favorite. He was succeeded by Captain John Paty, a popular and well-known master who had just returned from Manila with a varied cargo in the brig *Baltimore*.

Legislature met in session the summer of my arrival, of which I knew little, and remembered perhaps afterward only from the fact of its being the last with which Kamehameha III had to do, as he died the following year.

The third annual gathering of the Royal Agricultural Society took place in June at the Court House, with an exhibit of products and length of session modified by the prevailing sickness, yet presenting a display that paved the way for the success of the following year. Its officers for 1853 were: Judge Wm. L. Lee, president; six vice-presidents representing the various islands:

Geo. Williams, treasurer; John Montgomery, corresponding secretary; E. O. Hall, recording secretary, and an executive committee comprising S. Reynolds, B. F. Snow, C. R. Bishop, W. Newcomb and S. N. Castle. Dr. Wm. Hillebrand joined the society at this time and became a valuable member in the promotion of its interests. The Court House as also the Bethel were largely used in the early days for public meetings. At the time of my arrival the 2nd Foreign Church congregation, a recent offshoot from the Bethel, with Rev. T. E. Taylor as its first pastor, held their preaching services in the Court House, with their Wednesday and Sunday afternoon meetings in the lower story of the old Court House on Fort street, site of lower end of present convent.

The town was not closely built at this time, neither in the business nor residential sections. Comfortable, and in many cases spacious, grounds surrounded the dwellings of that period, affording ample room for garden plats and ornamental plants, the taste for which, while inherent, had but recently been made possible (except in stream-favored localities) through the inauguration, in 1851, of Honolulu's water works and its piping throughout the main thoroughfares. An attempt at street trees some years before had been made, but the survivors were scattering. The pathways of the premises of Paki and John Ii, on King street; of Kekuanoa; Haalelea and other chiefs, and of several foreigners, were of black sand and carefully swept daily by native women, in most cases, haunching along in their work with hand brooms formed by a bunch of coconut-leaf spines. It was no upright operation with long-handled broom with them.

The noted flower garden of that time and for some years later was that of John Montgomery, a lawyer, an enthusiastic horticulturist and prominent in the work of the Agricultural Society. His premises were those now occupied by the St. Louis College, near the Nuuanu stream. Mrs. John Ladd, Mrs. Judd, Mrs. Chas. R. Bishop and John Janion were among the early successful flower growers. This condition gradually improved under the stimulus of the Agricultural Society, and its services in obtaining seeds and plants that had growing qualities instead of being so aged at the start that the voyage of months, as it was in those days, killed all vitality.

In September of 1853 two deaths of prominent foreign residents occurred which deeply affected the community, the first being that of Fred. W. Thompson, the genial, fun-loving auctioneer and universal favorite, the other being Mr. Thos. Cleghorn, a retail merchant of Nuuanu street (father of the late Governor A. S. Cleghorn), as he was returning home from a meeting of the Bethel church, of which he was a deacon.

At the census of December, 1853, the population of the Islands was 73,138, being 35,441 less than the previous census of 1835. The foreign residents of Honolulu of all nationalities was 1180, of which 508 were Americans, 137 being Island born, and 349 British, of which 51 were Island born.

Another important event of the time, the planting of an acorn, was the corner-stone laying of the new steam mill and foundry of D. M. Weston, December 9th, 1853, of which the present Honolulu Iron Works is the outcome, noted in the journal of the day as to be "the first application of steam to mechanical purposes in Honolulu." This concern was located on the corner of Marine street near Queen, mauka of present W. W. Dimond warehouse. The Honolulu Flour Co. was another enterprise that had accommodation under the same roof, a queer-shaped three-story structure it was, built by an Eastern millwright named Hunter who came out with the material for its construction. This establishment of the flour mill gave an impetus to wheat growing in parts of the Islands found best adapted for it—Makawao, on Maui, and Kau, on Hawaii, proving the banner districts. Everything went well for a time till larger outputs in California and reduction in prices gave little encouragement to either end of the enterprise, farmer or miller. A biscuit bakery was then added to the concern to utilize the product for ship bread, the sale of which might be found with the whaling fleet. Of the financial success or otherwise of this I am not quite clear, for in December, 1860, the whole premises were destroyed by fire, as also the shipwright premises of Johnson & Foster, opposite it, on the Waikiki corner. This flour mill was originally planned for Wailuku, Maui, and was the enterprise of Geo. D. Gower of Lahaina and H. J. Croswell of Makawao, but upon the arrival of the mill building and machinery from Boston, in the fall of 1853, it was decided to erect it in Ho-

nolulu, and a company was formed with \$12,000 capital, comprising R. Armstrong, D. M. Weston, A. G. Thurston, J. Hardy, A. K. Clark, O. H. Gulick, J. S. Van Ingen and H. M. Whitney.

Probably the first effort toward a library in Honolulu shaped itself this same year in the formation of the Honolulu Circulating Library, in June, with W. H. Johnson, president; J. L. Blaisdell, treasurer; C. H. Lewers, secretary, and Stephen Reynolds, I. Bartlett and Geo. McLean, directors. It began its service of public convenience in the house formerly used as the police court, on upper Fort street, but shortly afterward located in the upstairs room of Honolulu Engine Co. No. 1, also on Fort street, just below the present site of the Judd building. The personnel of the officers indicates it as in the interests of the mechanics of the town, and it may be a coincident only, but not long after its settlement here, there was born the "Mechanics' Benefit Union," for mutual aid among the working classes, using the same hall for its monthly meetings.

The famous clipper ship *Sovereign of the Seas* visited Honolulu early in 1853, arriving from San Francisco to load oil and bone for New Bedford, which vessel brought back to the Islands Rev. S. E. Bishop with his bride to enter the mission field on Maui.

Inter-island steam communication dates from this period, as toward the close of 1853, in September, the side-wheel river boat *S. B. Wheeler* arrived from San Francisco and gave us for a time steam service with Maui, and once or twice with Kauai, and occasional use as a tugboat for this port under the name of *Akamai*. Owing to her age and condition a year's service was sufficient to send her to "rotten row." She was followed in the coasting trade by the steamers *Sea Bird* and *West Point*, and the service maintained till the loss of the latter on Kauai, in 1856, when it was abandoned. This led to the construction of the first *Kilauea* a few years later.

Reference lately to the trip across the Pacific of the Chinese junk *Ning-Po* is a reminder of the fact that these Islands had one of these specimens of antique marine architecture in its coasting fleet in the early fifties, known as the lorch *Premier*. A. P. Brickwood, for many years our postmaster general under Kame-

hameha V, was its commander for a time between the islands and may have been the one who brought her here. She was certainly a clumsy-looking craft, and gave one the impression she could drift to leeward much faster than she could sail to windward. This curiosity of the Orient was lost in the latter part of 1853.

Reviewing the foregoing incidents and conditions I am led to look upon the year 1853 as a momentous one in the history not only of Honolulu, but of the Islands. Naturally, the scourge which fell with such severity upon the native race was felt throughout the group, and, according to their custom, made "ka wa hepela"—the smallpox time—a date-mark with them ever after. The seriousness of the health situation was the occasion or excuse for anti-missionary clamor by a party seeking political influence toward annexation with the United States, as subsequent events proved, but which were thwarted on the eve of supposed success by the report of a filibustering expedition organizing on the coast to overthrow the government, resulting in the termination of all treaty negotiations at that time pending. In seeking the downfall of Dr. Judd, who was ever alert in Hawaii's interests, they sought to remove this controlling force with the king and chiefs—the power behind the throne—hoping thereby to obtain freer action toward broader policies of administration. But while this may have resulted, temporarily, the lessening of needed restraining influence on the king permitted him his indulgences that had on several occasions caused critical conditions and eventually proved his undoing, for he died in 1854, lamented by natives and foreigners alike for his goodness of heart.

Commercial activity set in with vigor at this period, and confidence in the future of the Islands, as indicated by the inauguration of inter-island steam communication; the machine shop, foundry and flour mill establishment, and introduction this year of steam power in sugar mill equipment, of which the Lihue plantation of Kauai was the pioneer. How much these connected improvements meant to the sugar interests of Hawaii may readily be understood from the predominant influence and magnitude of the industry in the Islands today.

ANCIENT HAWAIIAN MUSIC.

By DR. A. MARQUES.

KING KALAKAUA was much interested in gathering all the old traditions of his race, with a worthy idea of preserving them for posterity. So, during the ceremonies of his coronation in 1885, he called to Honolulu, from every part of the Islands of the Group, all the old Hawaiians, men and women, who were known to still retain the knowledge of the ancient meles and hulas, wherein these traditions were stored; and their recitals were continued in his presence, day and night, for weeks. Had the phonograph then been as perfect as it is now, the king would have obtained an invaluable and indestructible record of the native folk-lore "meles" then still available, which now are nearly all lost, since very few Hawaiians are still living who retain any real and unadulterated knowledge of the old art.

However, during the above mentioned period, through the courteous invitation of the king, I had an exceptional opportunity of hearing the true old music of Hawaii nei, and a condensed result of my impressions and remarks on the matter was published in the HAWAIIAN ANNUAL for 1886 (p. 51), to which I would like to refer the reader. I noted essentially, at the time, that the Hawaiian music seemed to have been roughly divided into two styles or classes: (1) one for the simple enunciation or recitation of poetry, whether historical traditions or mere ballads, and incantations; (2) the other to accompany religious ceremonies and dances (hulas). The first kind was a mere monotonous declamation, a chanting on one principal note with occasional waverings of the voice,—which might be termed shakes or trills,—on the closest surrounding tones or semi-tones; the other kind embraced on the contrary several notes,—hinting to an incipient idea of melody,—which I then stated could possibly be compared to a group of our notes, G, C, D, and E, or C, E, G with an occasional D, these notes being brought forth in the most varied combinations, under the stress of powerful and often wonderfully abrupt changes of rhythm, quite bewildering to the

European musician, although always confined to 4/4 and 2/4, as the 3/4 time seems to have been absolutely unknown and incomprehensible to them; the same predominance of common time can yet be seen in the tzygane music, and it seems to have been shared by the other Polynesian tribes. At any rate, the above mentioned notes were the limit of sounds used (of course on different pitches) and the old Hawaiians certainly never had any idea of our modern scales of seven notes, with the five intermediate semi-tones or accidentals; neither had they any positive feeling of our modes, major and minor. But, on the other hand, they positively had an intuitive natural knowledge of intervals between tones, smaller than our half-tones, which they used at will, while our ears fail to sense the same; but this failure is now due probably to our training and to the great use of the modern "equal temperament" instruments,—like the Piano, and string instruments with fixed frets,—whereon the various flats and sharps, although physically different, are produced on one and same key or fret, and in consequence both are so modified that our modern music sounds intolerably false to the people (the Hindus for example) who do recognize and appreciate the true intervals proper to each scale. Even now, in our present degenerate sensibility of hearing, it is easy, on a violoncello or even on a violin, to make apparent to a delicate ear, the difference between the adjacent flats and sharps, for instance between true C \sharp and D \flat ; this difference can even be produced by a cultivated voice; but therefrom it is easy to understand that, if we strive at producing a very sharp C and a very flat D, the intonation between C and D is really subdivided into three distinct intervals instead of the two we commonly use. It is well known that the Arabs and the Hindus go even further, and readily subdivide their octave scale into 24 semi-tones, instead of 12, as we do.

So it seems that, although deficient of a regular and complete octave scale, yet the old Hawaiians could produce and use at will in their singing, between the tones they used, intervals smaller than our half-tones, and recognize a mistake therein, if it occurred. The possession of this faculty is certainly interesting and remarkable in such primitive people as the old Hawaiians

were, but it appears that a similar faculty has been common to the music of all the Polynesian races, a fact that has been recognized by various authors. For instance, in the now rare work written by G. H. Von Langsdorff, Aulic Counsellor of Russia, who accompanied Captain Krusenstern in his voyage around the world, from 1803 to 1807 (published in London for H. Colburn, 1813) the writer, with the help of a fellow passenger well versed in music, Counsellor Tilesius, gives a full page text of a favorite tune of the natives of the Marquesas Islands, the peculiarity of which, as he says, "is that it dwells principally upon *quarter tones*, though not going beyond the *minor* third, E to G, occasionally sinking down to D, C and B, while strangely resembling the melody of the Catholic Kyrie Eleison, and concluding in the manner of choral music": the writer further says that while he had "to note the rising from E to G and the sinking down from G to E, by the notes F and F \sharp , yet the intervals are really quarter of tones, for though the notes are droned out, yet this difference is very discernible. . . ." Moreover, as noticed in the Hawaiian music, the rhythm of the Marquesan music was 4/4, subdivided into one long note and two short ones, this rhythm being steadily marked by the beating of the drums and by the assistants striking their arms and hands against their bodies in a peculiar manner. The sample of music published by Langsdorff bears a great resemblance to some of the old Hawaiian hulas, and especially to the "Alaapapa."

More recently, in the appendix to an interesting work on "Polynesian Mythology," by Sir George Gray, formerly Governor of New Zealand, (London, Murray, 1855), a very learned dissertation compares the music of the New Zealanders with the old Greek and Arabian musics, clearly establishing that the Maoris, although not having any regular complete octave scale, did subdivide the tones they used, into intervals *smaller* than our half tones, so that, in order to convey an idea of such intervals, Sir Gray had to invent extra signs to our usual notation, which, for convenience I might here call 1/4 \sharp , ordinary \sharp , and 3/4 \sharp , the flats being subdivided in the same manner, this making the Maori music very complicated and difficult to understand; and Sir Gray, who noted down a collection of more than 300

different New Zealand meles, confesses that he found it exceedingly difficult to master those intricate subdivisions, but that he did succeed to some extent, so that he could sing the meles well enough for them to be recognized by the people, and the Maori chief, who taught him, condescendingly told him that "eventually he could make a singer of him."

Following my study, published in the 1886 ANNUAL, Mr. B. Marx, in the ANNUAL of 1904, wrote an essay, in which, apparently fascinated by the remark made in Fornander's work, about the striking similarity of the Greek word "Melos" with the Hawaiian "Mele," to designate poetry of the same nature, he attempted to show that not only the chanting music, but even the epic poetry of the Greeks had a curious analogy with that of the old Hawaiians, going even so far as to compare favorably the narrative of the exploits of Kamehameha I, with that of Homer's Achilles. Mr. Marx had the exceptional advantage of being able to consult some phonographic records of meles chanted by old Hawaiians, and it is a great pity that those records seem to have been lost. However, from Mr. Marx's description of the music imprinted on them, it is evident that these records belonged to the mele chanting class, carried on one prolonged note, and not to the hula class, which brought out several different tones. This writer consequently was not able to add much to our knowledge of the matter, the only important remark in his article being that the phonograph recorded a quavering of the voice, "producing an interval not in accordance with our recognized division, somewhere between C and D ♭;" he also notes, as I had done before him, the rapid changes in tempo, from 4/4 to 2/4, "which were very bewildering."

But the most valuable contribution, by far, made to the study and knowledge of the old Hawaiian music and to the permanent gathering of what is still available on the subject, is fortunately preserved in the Bulletin No. 38 of the Smithsonian Institution, Bureau of American Ethnology; this is an elaborate treatise on the "Unwritten Literature of Hawaii and the Sacred Songs of the Hula," by Dr. Nathaniel B. Emerson (Washington, 1909). The author of this remarkable study,—who has had the advantage of being born in Hawaii, from missionary parents,—availing

himself "con amore" of his great intercourse with the Hawaiian people, whom he learned to love and appreciate, and taking good advantage of the perfect knowledge he thereby acquired of their language and of their ideas, has gathered full specimens of the original poetry which was sung to accompany some 30 different sacred hulas; these specimen cover the whole range of the native folklore, from facts of the Polynesian Mythology and of the historical traditions of the race, down to the effusions of love and the bucolic praise of the beauties of the Islands. It is to be greatly regretted—as he did himself—that Dr. Emerson could not have had during his long researches, the use of the improved phonographs such as are now used in Europe in the studies of unwritten popular music, so as to note down scientifically the characteristic tunes proper to each kind of hula; but he has tried to obviate this deficiency by reproducing such meleas as have been, from time to time, noted down by Miss Elsner, Mrs. Yarndley, Miss Byington and our faithful bandmaster, Captain Berger. Yet he fully admits the impossibility of faithfully reproducing those tunes through our modern notation, as well as the fact that no cultured musician, wedded to the modern ideas of music, can begin to fully master the intricate changes of time and the subtle intonations characteristic of the real old Hawaiian meleas. We must therefore rest satisfied with such appreciations as Dr. Emerson himself makes on the characteristics of this old music: "The bird is easier captured than the notes of a song;" the words of some of the antique poetry have been preserved, "but the music to which they were chanted has exhaled," displaced by the new system of music successfully introduced by the first missionaries, and which the gifted Hawaiians soon made their own with an imprint of their own nature. But the sweet local songs to which American visitors today listen with interest as genuine old hula, "have really no more connection with these than our negro minstrelsy has with the dark continent," and, in the modern published hulas,—even such as the very popular "tomi-tomi" and "wahine poupou,"—"the music is no more related to the genuine old article than the 'rag-time' is to a gregorian chant." Still, these modern productions undoubtedly remain true, in a measure, to some of the spirit and rhythmical swing of the ancient type,

although these showed, as special characteristics: "plaintiveness, to the degree almost of sadness, lack of acquaintance with the full range of our diatonic scale, and therefore a measurable absence of the ear-charm we call melody: these were its deficiencies;" but on the other hand, among the qualities which go to constitute what is fit to be termed music, we find that the old art had a "firm hold on rhythm, which was indeed one of the special excellencies of the Hawaiian music," . . . "of which rhythm is the hall-mark." "The typical (ancient) Hawaiian rhythm was a measure of four beats, varied at times by a two-beat measure." . . . "Added to this, we find a limited use of such intervals as the third, fifth and fourth, at the same time resorting extravagantly, as if in compensation, to a fine tone-carving that divides up the tone-interval into fractions so much less than the semi-tone that our ears are almost indifferent to them and are at first inclined to deny their existence; this minute division of the tone or step and neglect at the same time of the broader harmonic intervals reminds one of work in which the artist charges his picture with unimportant detail, while failing in attention to the strong outlines." . . . "Among the merits of this music we must not forget a certain quality of tone-color which inheres in the Hawaiian tongue and which greatly tends to the enhancement of the Hawaiian music," especially when underlined by rhythmic forms. Here I must add that the charm of the Hawaiian language is certainly due, as Dr. Emerson says, "to the predominance of vowel and labial sounds," this language using at most only seven consonants, while it has the faculty of juxtaposing the five vowel sounds, or of repeating several times with nothing but a kind of guttural break, the same vowel, without the interposition of any consonant; and, in my modest opinion, I do not doubt that the habit of these repetitions of vowel sounds helped to lead the primitive songster of Hawaii to the use of small subdivisions of tone, in order to better articulate or separate each repeated vowel from the accompanying ones. Another peculiarity of the ancient Hawaiian chanting, noted by Dr. Emerson, was the "outpouring of the whole sentence in one continuous breath, after which the lungs would again drink their fill," a technique which showed a surprising mastery

of the art of breathing, equal to that used in the Hindu "Mantra;" and this was probably due to the influence of the old religious idea of prayer-incantation, which required the whole of the incantation to be repeated to a finish with the outpouring of one lungful of breath, since the benefit of the incantation was supposed to be lost if the breath gave out before its end. This peculiar use of the lungs must have needed long and painful practice and training; and this fact, together with the other difficulties inherent to the memorizing of the unwritten poetry and to the discipline of the dance, easily proves that hula singing was indeed a difficult art, which obliged its votaries to devote their whole life to it, starting from mere childhood.

Dr. Emerson also alludes to the difference, previously noted by myself, of the two classes of music, one chanting on one note with the outpouring of one breath, the other introducing several notes with short verses of fixed rhythmical length, intermixed with the restful cadenza of the *i' i*, "a prolonged trill or fluctuation of the voice on the half of a step, or even some shorter interval," and the tempo of which was left to the caprice and feeling of the singer. Finally, Dr. Emerson thus summarizes his impressions on the subject: "The first thing that will strike the auditor on listening to this primitive music, is its lack of melody; the voice goes wavering and tilting like a canoe on a rippling ocean; then, of a sudden, it swells upward as if lifted by some wave of emotion, and after travelling there for a while with the same fluctuating movement, it descends back to its first monotone, until again moved to rise on the wings of a fresh impulse. The intervals sounded may be a third, a fifth or a fourth, but the whole movement leads nowhere, like an unfinished sentence. Yet, in spite of all these drawbacks and of this childish immaturity, the amateur and enthusiast finds himself charmed and held as in the clutch of some Old World spell, and this at what others will call the dreary and monotonous intoning of the savage."*

. . . As I understand that, at present, only a couple of Hawaiians still exist, capable of reciting the old meles and hulas in the correct old manner, I would venture to say that, before

* Dr. Emerson also gives a very elaborate and interesting description of the musical instruments used by the old Hawaiians and in this connection, I would like to add that instruments exactly similar to the "ukeke" are still used by certain savage races of Central Africa.

they, too, are gone, it would be a last and lasting tribute to the genius of her beloved race, if H. M. Queen Liliuokalani carried out her intention of having as many as possible of these melees duly preserved through the phonograph. Would it not also be interesting for science if the same recording instrument was used for the same purpose in Tonga, Samoa and Fiji, where the old customs and songs have not been so completely obliterated or denaturated, as in Hawaii, by modern influences?

However, before closing this article, I must take a little more space to state a most surprising fact, viz: that the greatest light that can now be thrown on the nature of the old Polynesian music, comes to us through scientific researches recently made on the music pertaining to the Eskimos and other races living in the North Polar regions. American writers began to delve into the mysteries of Esquimo music, in such works as the "Central Esquimo" by F. Boas (6th Annual Report of the Bureau of Ethnology, Washington, 1888), "Eskimo Tales and Songs," by Rink and Boas (Journal of American Folklore), "Eskimo Music" (The White World, N. Y., 1902); but the most elaborate and mathematically scientific knowledge now extant, is due to the devoted efforts of several Danish Scientists, the latest of whom are Professors W. Thalbitzer and Hjalmar Thuren, who, in the winter of 1905-6, went to Ammassalik, a forlorn station on the Eastern coast of Greenland, situated near a large settlement of the most unsophisticated Eskimos, for the sole purpose of phonographing their music; they were fortunate to return with 96 different tunes duly recorded, besides 36 airs noted in writing, all of which were duly deposited in the safekeeping of the Royal Library of Copenhagen. Subsequently two more years were devoted to the difficult work of measuring and transcribing those melodies into modern musical notation, with scrupulous indications of the real value of all the intervals used, including the various strange fractions of tones; and finally, Mr. H. Thuren published the interesting results of all this labor, in the "Revue de la Société Internationale de Musique" (Paris, 15th December, 1911). Now, from the perusal of this article, we can gather that, although separated by such a wide expanse of land and water, and in spite of the differences in the people, resulting from

opposite conditions of climate, the music still sung today by the Greenlanders untouched by civilization, is wonderfully similar to what we know of the music belonging to the meles and hulas of the old Hawaiians; in fact, in Mr. Thuren's narrative, one could easily substitute the word *Hawaii* for that of *Ammassalik*, and still remain true to the facts, in what concerns the general identity of the musical characteristics of those two distant and so dissimilar parts of the Earth. This similarity is all the more surprising, if we take into consideration, (1) the disparity of the two languages as well as the diversity which must result, in the people's poetic effusions, on one side from the extreme rigor of the Arctic climate as opposed on the other side to the balmy sweetness of our tropical regions; and (2) the differences in the customs or social habits and in the very ideas, which must accompany the differences of climate.

Thus, in Mr. Thuren's article we begin by noticing the similarity of the indispensable accompanying instrument, the drum, which carries on a rigorous rhythm in 4/4, mixed with 2/4, the time,—both with the Esquimo and with the Hawaiian,—undergoing the most unexpected changes of velocity and character,—to which the natives readily respond, although Mr. Thuren acknowledges that it would have been impossible to accurately express them, had it not been for the help of the phonograph's patient repetitions,—just as Mr. Marx discovered it in his experiment. And yet these changes do not occur at random, they are subjected to absolute rules periodically returning. Then, we find that, at the Pole as well as under the Tropic, the whole music is based on only two or three notes, sometimes four, but accompanied, as Dr. Emerson says, by “a wealth of bizarre intermediate intonations, in *thirds* or *quarters* of a *step*,” which, while unrecognized by the European ear, yet were faithfully and accurately measured on the phonograph with the help of the modern “Reisetonometer,” whereby we are shown tone-intervals larger by 5/4 than our usual tones, and half tones of all degrees, between a neuter third, a little smaller than our accustomed fourth, and other thirds either larger or smaller than our regular major and minor thirds; and finally a wealth of various other intervals between tones, smaller or larger than our semi-tones, sharp or

flat; and once used in a song, those uncanny intervals are never used one for another. As in Hawaii, there is no regular octavic scale, but when a singer has chosen his peculiar string of intervals, the same will be faithfully reproduced to the end, as they seem to be employed with a special meaning. All this makes of the Eskimo music, like that of Hawaii, an extremely complicated matter, though so rudimentary simple in appearance. We also find in the Esquimo art, as in many hulas, a well marked length of the verses, measured by a regular number of beats, suddenly interrupted by recitatives, corresponding to the Hawaiian chanting, or *i'i*. Then again we find in the Eskimo poetry the same variety of styles, from the religious, the epic and the bucolic down to the magician's weird incantations; and one of the not least surprising identities, is the one pertaining to the Eskimo "Angakok," the exact counterpart of the Hawaiian "kahuna," the former not less important and feared, in his power over life and death, than his tropical compere, and both using, for identical purposes, identical incantations and manoeuvres, carried out in the same retreat of a solitary hut. Finally, the resemblance between the descriptions given by Dr. Emerson and Prof. Thuren are so patent, and the personal, enthusiastic appreciations about the characteristics of the respective poetry and music they deal with, are so alike that Mr. Thuren could have penned the study on the Hawaiian hulas, while Dr. Emerson could have affixed his signature to the sentiments expressed by the former. And both agree also on this point, that however uncanny those primitive tunes may appear at first, yet one easily gets accustomed to them, and very soon one derives real enjoyment in listening to them.

In conclusion, since it is said that folklore represents the soul of a nation, while its music is the outward expression of that soul, from the identity between the Hawaiian and the Esquimo souls, as shown by the similarity of their poetry and music, could it not be asked whence the origin of this resemblance? Did the ancestral Polynesian carry some intercourse with the forefathers of the present Eskimos, at the time when the Polar regions were blessed with tropical climate and vegetation? and did the Polynesian emigrate to his Pacific Continent when the

change of climate overtook the Pole, only to see, in its turn, his own Continent submerged, a few remnants alone escaping in the mysterious "Hawaiki," from where, at different periods, immigrants set off to repopulate the other deserted peaks which had kept above the ocean? Quien sabe? and who will ever know?

THE SAGE OF PUNAHOU.

A Memorial Appreciation of William De Witt Alexander, LL. D.

By ARTHUR JOHNSTONE.

[Taste and modesty call for a prefatory note where another essays to outline and illustrate those salient phases which have formed the web in the life-work of the greatest man thus far born and reared in Hawaii. A few months before Professor Alexander's death, I held a conversation with the editor of the *Annual*, and ere long we found ourselves speaking with sympathetic regret of how the full ripe age of that able man must soon terminate his long and useful career. Between us the suggestion arose that some record of the man and his work—of his sturdy faithfulness to mankind, of his deep learning, and of his constant devotion to the Hawaiians—should be placed before him as our living tribute, ere the Grim Reaper poised his fatal dart. Mr. Thrum asked me to prepare such a brief sketch for the present number. To this I gladly assented; and now that Death has intervened, I feel constrained to sadly perform for the dead what I had joyfully anticipated writing for the living.]

His life was filled with sweetest melody
 Attuned to cadences of nature's lore,
 The which he gleaned along time's quiet shore,
 'Neath tropic moons, where stars float in the sea.
 O 'twas a life all joyous and most free—
 The one that men should think on more and more;
 A life so faultless it had passed before
 We understood those hidden things which he
 Had made the woof of greatness. Now we bring
 Garlands of cypress since our tardy eyes
 Behold his deeper springs. Beyond the tomb
 Once more we catch his welcome tones which ring
 Again in hark'ning ears,—nor shall vain sighs
 Bedim the vision that such thoughts illumine!

One of the world's foremost philosophers has said that "the sweetest and most inoffensive path in life leads through the avenues of science and learning; and whoever can either remove

any obstructions in the way, or open up any new prospect, ought so far to be esteemed a benefactor to mankind." Here the life of the intrinsically great man is brought to the epitome of a sentence. It is the truth without motley, as it was written by one who spent his quiet and studious years in making smooth the ways of modern thought, and in opening mental prospects which still influence the intellectual records of all English-speaking people. It applies fitly to the worth and work of the historian and philosopher of whom we write, since he was directly a benefactor,

Of all who home around or dwell within
The magic circle of this mystic sea;

and his passing has brought to the islandfolk the pain of a deep and irreparable loss. But in the gloom of death we still discern a touch of color, which, under appreciation and judgment, shall grow luminous as we approach. It is one of the fine traits of human development, that when we reach the point where we can judge of the real value of our own acts and thoughts, we are enabled to draw just inferences of the life and work of another. It is here that we are able to scan broadly the sum of life and do justice to our friend's worth without being influenced or inflamed by any foible, fault, or prejudice which he may have inherited or acquired. In other words, we have reached that higher plane whereon we do our own thinking; once there we push from us those friends of youth, our profunctory mentors and critics, and turn to an examination of the truth for truth's sake. Our estimate, then, of the man Alexander must be drawn as ability dictates from the assembled facts and from the testimony of the hearts and minds of those who have lived with him, and learned to love him through years of the trying, crucible-like isolation of Island life.

In Professor Alexander there will be found much of the indescribable with now and then a touch of the inexplicable, which traits, observation tells us, are two of the attributes to be found in men of great parts. Yet his was not the greatness of kings, nor of that kind called "fashionable fame," which holds the popular eye for a spell ere it fades forever. By some lucky chance he was also missed by Shakespeare's dictum which provides three

excellent ways whereby in his day men might come at greatness. Indeed, it falls within scientific truth to declare broadly that we know next to nothing of the periodic appearances and heredity of the great men of earth, either past or present; nor do we know more after their disappearance from life's quiet walks. What we do know is, that men die and their work lives after them for good or ill; that when the good and great man dies the seeds of his example have been sown beforetime to flower and fruit in unexpected or undiscovered places. May we not say, then,

Seers think with truth, that all the wealth of men
Is so much dross, compared to man's real worth;

and realize at the time how nature has placed stark limits before the achievements of great men and small? It is life's most terrible fact that when man becomes mentally and morally expanded to the degree of highest personal attainment and usefulness, he is brought beneath the architrave of the tomb prepared for physical dissolution. Happy, then, it was that the Sage of Punahou was able to so devote his youth that he became early able to speak well, to write well, and to act well in the daily affairs of life—three cardinal attainments which stand sentinel always at the beginning of a successful career.

At this point we may see a faintly-appearing psychic outline of the man and philosopher we have to contemplate. At all hours and under whatever prospect, there went with him the habit of sincerity and moderation, which gave to his private and public actions the painstaking finish and completeness of right-doing for the love of right. In the performance of his ordinary duties of official life, even casual observers noticed that he was one of those who did the most work with the least noise and bustle. But through his long and laborious years it is also noted that he never lost sight of the goal he desired to reach; with him there were few shortcomings, few turnings aside from purpose, and never the wasting on occasions of his mental and physical forces in useless enthusiasms. Outside the mob might shout lustily, but it would forget as quickly; he would work on and on silently, thinking deeply and faithfully, never to forget, yet always ready to give freely of his thought and time when the people's cause appealed justly. One phase of this man's high nature lay in his pushing

aside ambitious plans and devoting his time and energy to uplift and to mollify the condition of humanity in his immediate world. For the people of the Eight Isles of Hawaii he attempted all things which, from his point of view, were worth while and for the general good. In reaching ends, however, he had a quiet way of rebuking zealots by following none but practical methods, and such ideals as required simplicity of action and an uprightness of conduct which would in the end square with the hard and fast facts of human nature. The wonderful thing to most is that he was able, under the social complexities of the present, to live so retired and dignified a life, and still confer on diverse Island communities so many intellectual and material benefits.

All the virtues of mind and forms of thought which nature had made agreeable to him, ere long became as components and factors of his life; hence it was that his personal influence, acting daily through his habit and work upon companions and acquaintances, soon became useful and beneficial to the islandfolk at large. Here it becomes next to impossible to follow the critical method which largely treats an author and his work as things apart from his personality and social standing. In the Sage of Punahou we have an intricate piece of human dovetailing—if the figure is allowable—where nature in her inimitable way displayed a masterpiece of joinery; in him she brought to a perfect fitting of parts, a score of virtues and most of the attainments and endowments which make wholesome the phases of life that are distinguished as the moral, the philosophical, the scientific, and the devotional. One of his foremost traits was that from the first to the last he was the man of facts, and upon occasion he would marshal them in splendid array and with great logical effect. Best of all, he had early adopted the scientific method which bravely looks all facts, favorable and adverse, squarely in the face. By such habits he acquired much familiarity with intellectual tools and mental weapons, and 'tis but truth to add that he used them with the directness and precision of the wise and well-trained man. Your theorizer can be depended on to produce an aggravating tangle after a few paragraphs; but one may read all that Alexander has printed and left in manuscript, and the best inge-

nuity shall be unable to discover where he has once lost among the words either his argument or point of view.

He never committed an ungenerous action against his fellows—even in the trying days of our national transition to the republican form of government, when so many succumbed to anger and prejudice; this fact is well known to all, and is fully sustained by the historical sketches which he published during that disturbed period. In truth he was the most tolerant of men, and where his learning and wisdom constantly attract us, his liberality does so in the highest degree. Several instances might be cited where his spirit of toleration seems to have been based on the broad principles of natural development, not unfrequently mentioned in his writings, which teach us how it is often not best to apply scientific processes of analysis to our personal theories of life, or to those things which average persons have been taught in childhood, or to the beliefs which we have received ready-made from the hands of custom and habit. The corollary of this wide tolerance was that he was one who seldom dealt in the criticism of others or of their work; and when occasion required that he should speak, he always did so with modesty, and with the justifying facts at hand. I think it a fair deduction to say that his mode of thought and his literary actions show that he deemed the professional critic's work to be a heartless, if not an entirely useless thing, which seldom teaches us and never fulfills the conditions of right thinking. Being from youth richly endowed by the reason which justifies united to the reason which persuades, he could not help seeing that the average critic is seldom right in all, while often he is less than half-right in most; hence he must have felt how the critic's conception is narrowed, has much of callousness, is too frequently unjust, and oftentimes inappreciative of what will not aid him in reaching a foregone conclusion. Being thus of broad mentality, Dr. Alexander had not the temperament which dissembles before others; nor do I believe that any amount of persuasion or influence that might have been brought to bear would have constrained him to act or appear other than as he was by nature. The breath of his life was that uprightness which from boyhood had trained him to truthspeaking, and his reply to Bishop Restarick—when that gentleman

some time since submitted to him an article prepared for a newspaper—fully illustrates this trait of his character. The Bishop relates in the *Church Chronicle* of last March, how Professor Alexander returned the article the next day and, after making some suggestions, added: "When I first read it I was going to tell you that it would be best if you did not send it. On reading it the second time I made up my mind that since what you said was true, it would be as well to tell it, and that you would be the best person to do so." It is certain that during his life he held in estimation as deficient—next to useless as social factors—all who were by birth or through fashion as the sons and daughters of Proteus, persons in whom the truth lies perdu until it is forced forth.

It appears just and reasonable that we should deem him the type of the healthy and normal great man—not faultless, who is?—but of the wisest kind; a man displaying manifold virtues, evenly balanced at all points, in feeling and habit intensely humane, and scrupulously just in his actions and judgments. In full assurance we may say there was to be found in his character no trace of that conventional eccentricity so often found in the great men of the books; rather, he was one of the kind of men that experience has taught us to trust at sight—one of nature's upright, tender-hearted, wholesome beings, who was ever the friend of the helpless, and who practised a toleration broad enough to cloak the social conditions of life. It has been said in his history of English literature by so justly famous an author as M. Taine, that eccentric men are the best fitted to make manifest the deeper truths of life; but here it seems best to suspend judgment until that able Frenchman's premise is more clearly established, or at least until facts enough are forthcoming to verify the conclusion. To us it truly displays a higher and more practical merit in the normal Alexander, that we can remember him in his old age, with the sweetness and simplicity of youth clinging to him, flitting among us, book under arm, like some quaint, silent figure from another planet; his fine eyes welcoming a friend here and there, or lighting up splendidly as he grew interested in casual conversation, while awaiting his car at the street corner. Without shadow of affectation, pretense, or eccentricity, he was always the

genial companion, the learned man, and the deep thinker ready at the moment to aid friend or stranger from the stores of his knowledge and experience. Better still, he was one of those exceptional great men with whom you might argue the extremes of any question without fear of being snubbed for your temerity.

Like most men of great parts, he was a lover of solitude, and wooed retirement whenever the accidents of life and business permitted. It has been said that solitude is as apt to engender folly as to foster wisdom in men, which is very true of those of the fashionable class; but, happily, this does not apply to the bulk of the lower and higher classes, comprising,

The stock of men worth while, well sprung from earth.

Indeed, no one needs fear to degenerate in solitude, who, like Dr. Alexander, has so well assimilated general knowledge as to have become an original and independent thinker. It has well happened that the simplicity of his life and his shy and studious habits enabled him to avoid many of the stubborn social and commercial contradictions which constantly disturb society in general, and too often cause men to step forth with the wrong foot, where might they have had their heart's desire, how joyously would they have labored to success. Happily his lot was of his own choosing, and even in solitude—amongst the mountains of Hawaii, or within the placid precincts of his study at sequestered Punahou—he was the same quiet enthusiast, laboring diligently, never tiring, never complaining. At least for this wise man we may say that both time and life must have slipped dreamlike away,—aye, did he not come to the inevitable grave, smiling and unregretful, reading his favorite volumes until the very chills of death seized him? None but nature's wise men and earth's ingrained students are privileged to so live, so die! Yet if the pathos of his life thus brings us at a fetch to tears, it leaves our hearts chastened and draws us into the nearest relation to the ideal of nature herself; we are left, but with our thoughts and feelings wrought to the noblest sympathy and highest affection for the loved and honored Ghost who has passed before us into the gaunt shadow.

It was, then, to the former hurst and home of this gentle and learned being that I came of an afternoon in company with his

son, Arthur C. Alexander. It had been a warm day, and as we neared Punahou, which but a few years since had formed one of the city's suburbs, I noted how urban extensions were invading the historic district. Its former peace and quiet seemed disturbed by the main thoroughfare's increased noise and traffic; and even its placid beauty is sadly marred by a staring tourist hotel which thrusts its presence through the greenery near the corner of the college campus. Yet half a block away on either side you may rediscover the Punahou of old days, swathed in cooling shades, surrounded by a country-like silence where the bees still hum, and where the falling leaves litter the footpaths. We pushed the gate of what, since 1874, has been known as the old Alexander homestead, and entered. For the time we spoke no more, feeling that we trod within the pale sacred to the learning and spirit of a great man departed forever. The house was closed and seemed pervaded with the peculiar and oppressive silence which haunts sequestered spots; but it was not long before his son brought the appearance and breath of life by opening doors and windows, ere we began the labor of love which we had to perform. In the living room, which we had entered from the porch, I saw evidences of the simple tastes of the wise master; even at the door-jam two large wallcases of books shouldered each other across the end of the room. I shall not try to express in words the emotions which stirred me, or the memories which flew to my mind, as I turned the inanimate leaves of those silent records of dead men's thoughts, which I knew that he—after many turnings and perusals—had lovingly opened for the last time, alas! To break the sadness of such thoughts I called to mind the saying of the Greek philosopher that, "Death is the supreme Democrat who respects neither the quality nor lives of earth's wisest and greatest." But the feeling would not down, and I fear that no magic of time shall quite dispell its shadow.

Presently we ascended the narrow box-stairs of the old-fashioned house and, crossing a vestibule, entered his study—the very workshop of genius—where, after conception, let us imagine that the most of his work was wrought to the finished state in which it came to the public eye. Great students never write contin-

uously, and the manuscripts which he has left show that since about the year 1878, he wrote only as the occasion called. It thus happened that his intellectual fields would sometimes lie fallow through improving months, until some private or public need brought to the reapers a luxuriant crop; or, to vary the metaphor to one of Stevenson's apt resemblings, the ingredients were placed in the pot and allowed to gently simmer for months—with occasional tastings—until at last the contents were fit to be dished and garnished for the public. Throughout these and similar processes new thoughts are born continually, and old methods of thinking are constantly refurbished and improved; and it is just such habits as these which at last fetch literary efforts nigh to the ideal, if not quite to perfection. I stood with my hand on the large koa desk where he had done many and many a page of fine work, and made a survey of the room. I found it as I had expected—a well-tooled, ready-to-light literary forge, fully equipped for serious work, and for thought of the broadest and deepest. Here the influence and esprit of things were definitive and convincing. Bookcases filled the available spaces of the four walls, while a row of cabinets for manuscripts, pamphlets, and literary odds and ends, ran across the upper end of the chamber which, in its length, occupies the width of the frontage; above the bookcases were several quaintly-framed old pictures—evidently heirlooms—such as are fitly hung in defiance of fashion in the libraries of the wise. In one corner the top of a case was ornamented with a group of Island curios, and on a side wall at the other end of the room was hung a portrait in oils of the master who had ruled this wide domain of thought and action.

Through the long summer afternoon we reverently made search through his literary belongings, oftentimes pausing to speak of the venerable dead, and to ask or answer questions of the past. Everything showed me that he was a methodical man by habit. He was certainly very unlike the conventional geniuses of whom the public hears and reads so often. He surely could not have abided their alleged wild confusion of scattered papers and book-strewn floors. Here all was precision and order; indeed, there was dearth of wonted loose papers, and what was more astonishing, a complete absence of the expected literary notes. However, his son said

that it was his father's practice to make few memoranda, telling me how he had composed the first sixteen chapters of his unfinished history of the Islands, quite without notes—"out of his head," was the apt way in which he expressed it. In truth, a thorough search for notes, or aught else to aid in the completion of the volume, ended in failure. This alone is sufficient to show that Professor Alexander must have been born with a phenomenal memory, rather than merely having one excellently well-trained, as most have surmised from the full and exact replies which he would give on the spur of the moment to questions embracing wide fields of learning. His son further says that it was his father's habit to compose slowly but exactly, thus producing manuscripts with few changes, except the addition or deletion of sentences and paragraphs. This statement is fully borne out by his unpublished papers before me; and all who have written to some purpose will readily agree with what is here reported. They will, however, point out—as it probably was in Alexander's case—that between the hours of mental travail there may be written other pages where the thoughts flow like oil, and where the argument seemingly becomes an automatic effort, like the putting together of a puzzle solved. Many such pages are to be found in the Alexander manuscripts, which are easily discoverable by their flow and style—where we feel that his pen would barely keep pace with his thoughts.

The sun was far in declension when unwillingly I left this literary paradise, bearing under my arm a large sheaf of valuable manuscripts and letters, with the promise of more. When I reached home I spread them out on my working table and read far into the night. Need I repeat how the time sped in the pleasant task? how I was particularly filled with surprise and delight when I reached his beautiful, philosophical essays of travel? But ere we examine more fully these treasures of style and models of healthy thought, it is necessary to speak briefly of the scope and diversity of his work. In doing so let us not forget or underestimate the many lesser topics which it seems he always held in mind—the little things pertaining to the wider and profounder world wherein he lived and had his real being. These minor matters are made up mostly of contributions to the Ha-

waiian Historical Society and to other local organizations, and of his occasional discussions of the current political events; all of these will be found to be highly interesting and filled to the brim with information of the rare and wholesome kind: and yet these must be considered as but the briefest abstracts, as parts and portions only of those larger studies which filled his leisure and were his chiefest occupation in life, namely, the study of history and historical methods, together with his beloved study of the great sociological questions which, in their far reach and with their profound depth, include many of the phases of modern scientific philosophy. Here he was wont to deal with wide-spreading generalizations reached from the details of human development; indeed, throughout his writings frequently will be found deductions from such natural laws, providing for the moral uplift and material improvement of individual man, as well as for that of social communities of men. As has frequently been said, the scope of his writings verily reaches the distant corners of earth; he might with justice—by virtue of what he has written in the defence of man and his works the world over—be allowed to call all men brothers and claim the earth for his country. What he has left us shows that he was in no sense either dreamer or theorist; all that he has accomplished is real and practical, being composed of that which shall bring a profit to mankind, and shall swell to a sensible extent the sum of the world's knowledge. Thus it appears that while he was not permitted tuition in the fabled garden of Academus, yet he was able to glean of the truest and best kinds of knowledge in the modern haunts of men, or in the more tempting solitudes of his Island home. Truly do I think that in his youth the goddess Maya must have smiled on him!

I have now arrived where my allotment of space warns me to make a somewhat summary notice and appreciation of his writings already published, or left in manuscript; but perhaps a fuller review is now unnecessary, since I learn from his son that the heirs think of issuing a memorial edition of his works which will include all. For like reason I shall forego at this time further mention of his well-known volumes of Island history than to say that what I shall write of his essays of travel will be found applicable to these. Briefly, then, there are twenty-two essays

(there may be more), the most of which have not been published, while a few have found the local prints only, which is about equivalent to being out of print. These manuscripts cover a wide range, and may be divided for convenience into essays historical, philosophical, philological, religious, and of travel, viz: Modern Jerusalem and Its Holy Places; Agriculture in Palestine; Egypt; The Ruins of Thebes; Recollections of Damascus, in two parts; A Visit to Nablous, the ancient Shechem; The Missions in Madagascar; The Oahu Charity School; The Resurrection of Bulgaria; Ancient System of Land Tenures in Polynesia; The Presbyterian Church in Egypt; The Conversion of the Anglo-Saxons to Christianity; A Study of the Population Question in France; Translation from the French of a similar article, by M. Cheysson; Thoughts on Buddhism; The Brahma Samaj; Buddhism in China; The Rise of Mohammedanism; The Polynesian Language; On the Development of the English Language; Australian Federation, from an American point of view; and, On the Industrial Teaching of the American Protestant Mission to Hawaii. There is no doubt that out of these essays, containing over one hundred thousand words, might be selected an interesting volume of profitable information, interspersed with matter of great literary beauty.

Perhaps what is most noticeable from the study of these manuscripts is, that Professor Alexander had the rare faculty of clear and accurate condensation; to this was joined that other rare gift—the ability to make important paragraphs stand forth in picture-like exactness, thus impressing the memory deeply and permanently. Another thing to be noted is that where he feels or believes profoundly, he is sometimes able to glimpse in words, those deeper meanings which some think underlie the outward appearances of nature. At all times he is alert to the moral sense of things earthly, and seeks to reconcile this potent primitive factor, as far as may be, with evanishing theories of life and existence, which form the usual undergrowth in the forests of humanity. To me it seems wisest to discard the method familiar to most literary historians of comparing the ability and mentality of this writer or that with geniuses of established fame. The truth is that minds, like thumb-marks, differ universally and radically, al-

though they may possess a general, or even particular, similitude in contour. Upon reading the writings of Alexander we soon become aware that his work bears the direct impress of his mind, and that he introduces very little of the extraneous. In the first of these traits he reminds me of the French Montaigne, and in the second constantly reminds me of the Roman Tacitus; but in accuracy of statement, as in exactness of fact, he outsteps both of these great writers: here, however, all resemblances must be said to cease.

To exemplify these impressions it will be best to read the following short excerpts taken from his unpublished papers. The first is from his essay on "The Ruins of Thebes," and may be taken as a fair sample of his forcible historical style:

The principal existing ruins of Thebes belong to one period, namely, that of the 18th and 19th dynasties, the most splendid in the Egyptian annals. * * * The earlier period, between three and four thousand years B. C., during which the pyramids were built, is generally styled the "Ancient Empire." Mariette Bey has during the last twenty years collected many invaluable relics of this time, which all prove that it was a peaceful, prosperous period, and that then the fine arts, especially sculpture, attained a perfection which they never afterwards reached in Egypt. Memphis was then the capital not far south of the pyramids. At a later period, probably about 2000 B. C., this peaceful, unwarlike state was overrun and trodden under foot by Asiatic hordes known in history as the "Hyksos" or Shepherds. The Egyptian princes retreated to Upper Egypt, and made Thebes their capital, and there bided their time. By incessant conflicts with the invaders for 250 years they learned the art of war and perfected their military organization, until a great national uprising took place and the detested foreigners were driven from the country. Many of them settled in Southern Palestine and were afterwards known as "Philistines." Then followed the palmy days of Theban greatness, under what is known as the "New Empire." For several centuries the Kings of Thebes carried their victorious arms into Asia as far as the Euphrates, and embellished Egypt with the grandest buildings in existence next to the pyramids. It was a period when the national spirit rose to its highest pitch, and when great progress was made in the arts and sciences under a series of able monarchs. It was, however, a period of cruel despotism, during which the blood and treasure of Egypt were wasted in distant conquests. It seems also to have been characterized by priestly fanaticism. The temples and tombs show that an important change had come over the spirit of the Egyptian religion. In fact, the priestly caste seem to have increased in power until in the twenty-first dynasty they usurped the throne itself.

Throughout the descriptive parts of the essays of travel he uses a freely-flowing and familiar style which is pleasing through its simplicity and vigor. One of its merits lies in the artistic way by which he connects in the narrative disjointed facts and things, thus producing a well-wrought mental tapestry that by its quaint-

ness and color stimulates thought and quickens interest continually. Unlike most writers, we find that in his descriptions of towns, buildings, and memorable spots, his narrative becomes wonderfully succinct and graceful, while not unfrequently it reaches the plane of a direct and natural word-eloquence, which takes mental grasp of the reader. Everywhere you will find the daintiest of thumb-nail pictures, perfectly rounded within the limits of a paragraph, as the following excerpts, the first from the essay on Thebes and the second from the Recollections of Damascus—will show:

* * * it was on the 17th of December, 1878, just at nightfall, that the river steamer "Beherah" was approaching Luxor. The Nile here is about half a mile wide. We saw on the left an extensive series of palm groves, behind which loomed a couple of gigantic pyramidal towers, which, as we afterwards learned, form the outer gateway of Karnak. On the right a wide green plain began to open, behind which we saw a range of reddish hills honeycombed with tombs. It was dark as we arrived at the village of Luxor, amid discharges of guns and rockets, and the burning of blue lights, by which we could see a village of white-washed flat-roofed *adobe* houses, a colonnade of giant pillars half buried in the earth—one flat-roofed building with the tricolor of the French Consular Agent, actually standing on the stone roof of the temple—a fleet of dahabeahs and native boats moored to the bank, while a motley crowd of donkey boys, guides, interpreters, peddlers of antiques and beggars crowded the shore, and gave three cheers for the first steamboat of the season. * * *

* * * The street between was crowded with what seemed at first to be a wild masquerade or an endless carnival of picturesque and strange costumes, a motley throng of many races, creeds and occupations, each with its distinctive dress. Among them were negroes, fierce-looking Bedouins from the desert, cut-throat Circassians, armed to the teeth, Turks in military uniform, Greeks, Persians and Damascenes, in every variety of colored turbans and dress, and women enveloped from head to foot, some in white sheets like ghosts, with an embroidered gauze over their eyes, and others in dark blue or brown veils, walking on wooden clogs. This much can be said for the Moslems, that a veiled woman on the street is sacred and inviolable. Even to gaze at one is an offense, unpardonable if committed by an infidel or Giaour. Amid this busy throng resounded the cries of fruit-peddlers, lemonade sellers, beggars, and porters carrying heavy burdens, while riders on horses and donkeys, and camels with huge loads of lumber, cases of kerosene or bales of cloth, charged right through the dense crowd.

Wherever he treats of man and his works, either past or present, you find an underflow of serious philosophy which oftentimes verges upon sadness; but this we can more easily understand, since the most of us have either read or heard quoted that remarkable sentence of Professor Huxley's, wherein he says in part, "I know of no study which is so unutterably saddening as that of the evolution of humanity, as it is set forth in the annals

of history * * *'' In his travels Professor Alexander continually fell across the material and living evidences of such things, which entertain the foolish but sadden the wise. For example, he barely enters the beautiful scenes of Egypt before he observes how the people are, "very industrious, but wretchedly poor, working the fields with nothing on but a skull cap and long blue shirt"; and further along gives in pathetic sentences the heart-rending details of the miseries and oppressions to which the laboring classes are subjected by the ruling Khedives. In the Holy Land it is the same. He describes how its melancholy and desolate aspect causes prepossessions to flit forever.

He also casts from him the inebriant superstitions of belief, and declares broadly, "It is not the inhabitants nor the buildings of today that form the chief attraction of Jerusalem, but the sites of the memorable events that have taken place there"; and again, "It is certain that there is not a single house now standing which existed in the time of our Savior." The essays are also well sprinkled with valuable archaeological notes and explanations, which are supplemented in places with apt comments, and oft-times with that deeper sort of commonsense belonging to the scientific method. For instance, take the following from his Jerusalem: "Just north of the Harem enclosure is an immense reservoir called 'Briket Israil,' eighty feet deep and capable of holding thirty million gallons, which some consider to be the Pool Bethesda. I believe that at first a natural depression was deepened so as to form an enormous moat for the defence of the northern face of [the tower] Antonia, and that afterwards under the Roman government it was finished and lined with extremely hard hydraulic cement to serve as a large tank." Thus, what is called good hard sense, backed with a bit of keen observation, sweeps away with a breath another of the myriad mythopoeic cobwebs that time weaves around men's lives and thoughts. Nor does it matter to him where his judgment falls; often it will be in sarcasm against the Mohammedans, as often a rebuke to the Christians of the East, where their superstitions become crass. In the midst of a fine description of the Holy Sepulcher is found this concise comment, which is greatly to the point: "However incredulous one may be in respect to the tradition [concerning the

tomb of Christ], he cannot approach without emotion a shrine so rich in historical associations, or fail to respect the sincere awe and devotion, evidently felt by some of the pilgrims. * * *

The essay on Jerusalem closes with a clever and interesting discussion of the genuineness of the Holy Sepulcher, which leaves nothing to be desired, from the viewpoints of historical citation and commonsense.

Although time presses, I feel that these remarks should be extended to make mention of the essay on Agriculture in Palestine. This paper is full of new information which probably has not as yet passed into print through other channels; in truth the author says that while in Jerusalem he discovered an exact and exceptional source whence he drew his knowledge of "the land titles and life of the modern peasantry." After an effective sketch of the country, its climatic conditions and agricultural possibilities past and present, he deals in a rational and scientific way with land tenures, and with the methods and details of the lives and labors, seasons and crops, government and religion of the wretched country. He closes the essay with a few convincing sentences showing that one of the chief causes of the blighted country and degraded people is the remarkable fatalism which teaches that every human blessing comes from Allah, or by him is snatched away. Truly, such conditions show that a belief is the most dangerous thing in life—in Palestine, at least; but, on the whole, they may serve to remind us that there are further applications of the lesson which, if mentioned, might seem impolite at the ear of our Western Civilization. Standards of ethics, in like manner, become delicate things when examined under the modern phase, since they require for solution the testimony of innumerable men and the experiences of many nations through long historic periods. But ere I close this too short review of his manuscripts, I must give a brief extract showing the smoothness and force of his argumentative and scientific style of composition. The following is taken, for convenience, from his rich and instructive introduction to Andrews' Hawaiian Dictionary:

* * * Although, in a scientific point of view, the Hawaiian may seem to be one of the most attenuated and degenerated dialects of this [the Malay] family, we believe it to be practically one of the most copious and most expressive, as well as the richest in native traditional history and

poetry. * * * The first step in the formation of language was no doubt the employment of particular names to denote individual objects. It was only afterwards by a process of abstraction that these individual objects were classified by those qualities which are common to a number of them. It is from the specific that we ascend to the general. The same principle applied to verbs or names of actions as well as to nouns. The savage has in his mind a picture of the whole action, and does not always abstract or separate the principal circumstance from the accessory details. This is true of uncultivated languages in general, and is not peculiar to the Hawaiian. Thus the Javanese has ten words to express as many different modes of standing, and twenty of sitting. The Feejee has sixteen words meaning to strike and eight to wash. * * * So in the Hawaiian everything that relates to their everyday life or to the natural objects with which they were conversant is expressed with a vivacity, a minuteness and nicety of coloring which cannot be reproduced in a foreign tongue. * * * Almost every stick in a native house has its appropriate name. Hence it abounds in synonyms, which, however, are such only in appearance, and on which a volume might be written. * * *

I am now come to those last facts of the man and his work which will well set forth and emphasize some of his traits of character in another phase that lies, as it were, on the confines between his private and public life. Of course, these facts must include those social additaments which show the regard and estimation wherein he was held by his friends and associates; and this is the more desirable since, sooner or later in life, we always find that it is the best men of our generation—those who stand highest in our estimation—that render the most service to the future. Ten years ago Professor Alexander's attainments by their merit brought him the unsolicited degree of LL.D. from Yale, his *alma mater*; while among other learned bodies, he was a fellow of the Royal Geographical Society, of the Astronomical Society of the Pacific, and a member and contributor of the Polynesian Society of New Zealand. This portion being somewhat of a biographical nature, I shall here give a few penciled notes of his life which his son found among his papers; these, which were made by request for the last edition of "Who's Who in America," but, not being fully used there, have now become of local interest, since it is well known that he never spoke of himself, unless constrained to do so. In any event, these recent pencilings clearly exemplify some of the characteristics already mentioned, while they bring into clear relief, within a small space, a wonderfully brief resumé of his life and work:

"* * * In regard to my biography, the principal facts are given in 'Who's Who in America' for 1901, but I will add some

additional notes, from which you can select, as you judge best. In regard to ancestry, I am of Scotch-Irish descent on both sides, my ancestors having emigrated from Ulster about 1730. My grandfather, James Alexander, married Mrs. Mary Rose Depuy, Dec. 26, 1793; removed from Virginia to Kentucky about the year 1800, and settled near Paris, Bourbon Co., Ky. He was 'a wise and godly Presbyterian elder.' My father, William Patterson Alexander, was born there July 25, 1805. He was educated at Center College, Ky., and studied theology at Princeton Seminary, N. J.; was married Oct. 25, 1831, to Mary Ann McKinney of Harrisburg, Penn., and sailed from New Bedford, Mass., for the Hawaiian Islands, as a missionary of the American Board, Nov. 26, 1831. He lived and labored here for the welfare of the Hawaiian people for fifty years, and died Aug. 12, 1884, in Oakland, California. My mother was the daughter of Mordecai McKinney of Dover, Del., and afterwards of Carlisle, Penn., and of Mary Chambers, daughter of Col. William Chambers, who commanded a regiment in the revolutionary war. She was a devoted mother and faithful missionary, and died June 29, 1888, at Haiku, Maui.

"As regards myself, I will add a little to the facts given in 'Who's Who.' When an infant, I went with my parents to the Marquesas Islands, and with them spent nine months of hardship and peril among the cannibals. My childhood was spent in the beautiful but then lonely station of Waioli, Kauai. I was a shy and sensitive 'book worm.' At the age of ten I was placed in the mission boarding school at Punahou, now Oahu College, where I was trained under the Rev. Daniel Dole, father of Gov. S. B. Dole, a man of liberal culture, and prepared for Yale. My favorite studies were Greek and English literature. After graduating I was a tutor in Beloit College, Wis., and later on a 'Hoosier Schoolmaster' near Vincennes, Ind. Since returning to the Hawaiian Islands, my life work has lain chiefly in three different lines: First, Educational. I was professor of Greek in Oahu College from 1858 till 1864, and then president of the same until 1871. Since 1887 I have been a member of the Board of Education as well as a trustee of Oahu College. Have taken a deep interest in the Public Library, of which I am a trustee.

Second, Land matters. I was surveyor-general from 1871 till 1901, employing the methods of the U. S. Coast Survey to form a scientific basis for all the surveys of land property, public and private, in the country. I have taken a deep interest in the promotion of small holdings, and in the Torrens system of registration. Since Feb. 1, 1900, I have been assistant in the U. S. Coast and Geodetic Survey, in charge of a branch office here. Third, The history, ethnology and folk-lore of the Polynesian race. I have devoted much of my spare time to these studies, and have published some of my results, as will be seen from the list in 'Who's Who,' besides which I have written many articles, lectures, papers for the Social Science Club, etc. To Thrum's Hawaiian Annual I have contributed articles on The Early Teaching of the Hawaiians, Education in Hawaii, Constitutional History of the Hawaiian Kingdom, History of Immigration to Hawaii, etc. I was one of the founders of the Hawaiian Historical Society, and have been its corresponding secretary till the present time. I am also a member and contributor to the Polynesian Society of New Zealand. * * * I have not been a politician, although I have twice been sent as a government commissioner to Washington, but have always exerted my influence in favor of good government and in the interest of the native race."

A letter which Professor Alexander wrote while surveying in Maui to the editor of the *Advertiser*, in August, 1864, and towards the close of the Civil War, brings out his patriotism and love for the homeland in true and lively colors, while it also shows that where he had reached conclusions which he believed to be just, he wrote his thoughts with courage and without hesitation. The letter is of interest as well from its revival of half-forgotten historical reminiscences. It is as follows:

"Dear Sir:—Between discussing sugar and exploring the West Maui mountains, I have not had much time to think of politics. I have, however, appreciated the gallant stand your paper, the 'Advertiser,' has made on the constitutional question. I am therefore the more grieved with the coppery hue of the review of Foreign News in the last 'Advertiser' of the 6th inst., and wish particularly to protest against the treatment of the 'Alabama' affair. The only sentiment that it seems to have excited in the

minds of your editorial staff, is admiration for the bravery (?) of the pirate Semmes. The beaten pirate seems to have been the hero of the battle. No praise for the gallant Winslow and the Yankee tars who dealt such swift retribution on the pirate and wiped out the reproach of the American Navy. Nor does the writer seem to have perceived the importance of the action as a fair trial of the rival English and American systems of naval gunnery. As Semmes was ordered out of port by the French Government, I don't see the extraordinary merit of his putting the best face he could on the affair, and challenging an enemy he was obliged to encounter. Many a time before he has been challenged to fair fight by the 'Kearsarge,' the 'San Jacinto,' the 'Vanderbilt' and other vessels, but he has always declined in spite of his loud and frequent boastings. I do not think that the 'Kearsarge' was a 'superior vessel' to his own. She is a counterpart of the 'Wyoming,' stanchly built, but not fast, and of about equal size with the 'Alabama,' 1031 tons and 8 guns. The 'Alabama' carries 11 guns, including an Armstrong 100-pounder or two, and worked by an ex-gunner from the Royal Navy. In fact, it was a naval victory of the United States over England. The pirate was English from keel to truck, manned by an English crew, built in an English port, and armed by English cannon. She was loudly boasted of as a *chef d'oeuvre* of English naval architecture. I have no doubt that if the 'Alabama' had sunk the 'Kearsarge,' John Bull would have claimed it as a British victory. It is important as showing the superior gunnery of the American Navy, and the superiority of Dahlgren and Parrott over Armstrong guns. As for the conduct of the yacht 'Deer Hound,' only read the comments of the London 'Daily News.' Why, our Secesh neighbor here readily admits that Captain Winslow had a perfect right to have fired on the 'Deer Hound,' as I think he ought to have done. As for his prisoners, instead of paroling them, he ought to have kept them in irons until he had a chance to send them to New York. I expect to remain here a week or two longer. I hope to hear important news from Grant soon. Lee's present movement resembles Bragg's before Chattanooga when he detached Longstreet and sent him into East Tennessee for a diversion."

Where a man is born without envy he is sure to have great and good qualities, wrote the Due de la Rochefoucauld, more than three centuries ago; and our English Landor has told us that we must not mistake really great men, who always seem of less stature than they are, for those middling men favored by circumstances, who appear of greater stature than belongs to them. Both of these aphorisms apply to Professor Alexander. He was wholly without envy of his fellows, while for them he had the sincerest sympathy, enhanced by personal coöperation, or often by practical aid when needed. Here for the moment I write from information incidentally gained during years of editorial work in the Islands. This whole-hearted man knew that mere pity is but a poor charity, and hence his good deeds came forth decked with golden chains; but his great merit lies in the fact that he did good by stealth, and would even take means to prevent the publication of his generous acts—an example which might needs be followed with much profit in the Islands. Ofttimes his acts were to relieve individuals; but I have known of cases where he has provided from his private purse for persons, or even for a whole family, for weeks or for many months, until misfortune ebbed. Here is a case in point, the memoranda found among his papers showing that by some hap—perhaps native gratitude—it found publicity in “*Ka Nupepa Kuokoa*” of November, 1869. Kekoa, a native from the island of Rarotonga, married to Kaihoe, an Hawaiian woman, while he was in California had killed in self-defence a fellow-islander, and was sent to the prison at San Quentin twenty years for manslaughter. While imprisoned, Kekoa had petitioned Queen Emma (who happened in San Francisco at the time) for assistance, which from some neglect never came to him. When he had been imprisoned eight years, President Alexander of Oahu College arrived on the Coast, heard of Kekoa’s case and went to see him. There he learned of the petition, examined into its merits, at once took the necessary steps, paying all expenses himself—including lawyers’ fees and a month’s necessary advertising,—at last got Kekoa’s release, and sent him home to his wife and little ones on Molokai by the ship “*Idaho*.” This is but one of many cases which have fallen within my knowledge—some having occurred quite recently; but this one, having previously been in print, has been here used without breach of propriety.

For the conclusion of this brief sketch, I shall quote but a few of the expressions of regard and appreciation which the members of the family have received from those who have had, at one time or another, intimate relations with the dead. The first is by Mrs. Emma Metcalf Nakuina, who says:

"I first knew Professor Alexander in 1861. He was then the head teacher in Oahu—then called Punahou—College, while Mr. Mills was the president. I was about fourteen years old, and in the Preparatory department; he was my teacher in one of my classes. The Professor was quite young, and with his wife and child occupied the 'Octagon House.' I recall his kindly modest face, almost womanly in its expression of diffidence, and easily disconcerted by the scampish boys of our class, who tried to escape answering questions in the lessons they had not studied, by pretending they had not heard, and asking 'What?' over and over again, while our stuttering, blushing teacher would abruptly dismiss the class. But he was the kindest, most patient of teachers to those pupils who showed sufficient interest in their studies.

* * * Long after I left school and he was no longer a teacher at Punahou, and I a gray-haired mother and grandmother, I went confidently and freely to him (sure of his patient help) for elucidation or enlightenment on many problems which I felt he could solve better than anyone else. * * * We had the utmost belief in his profound erudition and scholarly attainments, and felt a personal gratification and pride when the world recognized them. * * *

Rev. W. D. Westervelt, one of his fellow-workers and warm friends, speaks of him in the following sympathetic manner:

"* * * Personally, I shall miss him very greatly, because of our hearty sympathy with each other in our historical and legendary research. He was so thoroughly candid, and gave value to the efforts of others in such a way as to encourage them, and thus to lead them to increased effort. This was especially true during the past two years or more when he very carefully looked over the work of Father Reginald of the Honolulu Catholic Mission, who has been preparing a history of the Catholic Mission in Hawaii. It was my privilege to examine the same work and to talk over many of the chapters with him; and the

broad grasp of his mind upon the value of historical labor—which sometimes opposed his own views—was very impressive. * * *

The next expression is by Mr. J. F. Brown of the Survey Department, a gentleman of mental culture and of more than usual intelligence, who writes: "Of few men can it be said that the intimacy of years disclosed no weakness, but, on the contrary, seemed to deepen admiration and respect. Of this rare type was your father—and my good friend. I knew him first as one of his pupils at Punahou, then through years of association with him in his work of the Government Survey, and later in frequent friendly intercourse until the time of his last illness. At no time either in speech or in action, was there the slightest departure from the high ideals that we all credited him with; and while I feel a deep personal loss in his death, I also feel how fortunate is he who can leave behind him the memory of so great honor, intelligence, and lofty example."

The following comments of value were penned by Rev. J. M. Lydgate of Kauai: "* * * As you know, in my boyhood and early manhood days I was very intimately associated with him in the class room, and then on the Government Survey, living with him in camp for weeks or months at a time; and although during later years I have seen little of him, I have always cherished the most profound respect and enthusiastic admiration for him, founded on the intimate knowledge of those earlier days. During all of my life I have been very grateful to him for the revelation he was to me of rare gifts and noble qualities, and for the inspiring glimpses he gave me into the realms of literature and science. I count myself singularly favored to have had that intimate experience of so rare a man—and the inspiration of it has remained with me through life. Some men, I fancy, are rated at their full value, or even above it. Your father was one of the few who was seldom rated at his full value; he was so modest and retiring that only those who knew him well could appreciate him fully—and accordingly his loss to the community and to the Islands will not be fully recognized, though all intelligent men feel it is very great. The memory—the fame—of such a father must be a very valuable inheritance. * * *" Let the picture

be rounded to a close with the brief but fervent words which are copied by permission from a letter to Governor Frear, written by Father Dutton at the Baldwin Home, in the Leper Settlement on Molokai, namely: "Dear Professor Alexander!—Not often does the Territory suffer a more serious loss than it now bears in his death. It struck me personally as a bereavement. A soul so gentle, so kind, and of such exceptional ability, is of distinct value to any community, and his loss (in the human sense) is little less than a public calamity. May he rest in peace. * * *"

Thus it is in all its phases, that from the testimony of men differing widely in their thoughts, feelings, and lives, the evidence focuses to the point where his life teaches the best philosophy to be one which prepares men to live for the benefit of their fellows, and for posterity; hence we are encouraged to so form our lives that at death we may bequeath a living heritage which shall not die, but live again in the renewals of time. "Not length of days is given, but the sweetness and strength thereof; their memory shall live even though the dead are dust." Thus Stoddard, one of the bravest and best of men, cries to us out of the inexorable past. Nay, the torch which has fallen from Alexander's inert hand shall not drop to earth and be extinguished; nor shall his memory fade,

"Where sounds the surf through Channels eight,
That hold the Islands for their fate";

and even now the spirit of the man and his work quickens our minds and feelings.

The lights and shades of the past arise unbidden and form themselves into a phantom scene behind closed lids. Again we see the quaint boyish figure, in the familiar gray or brown suit, when, with bent and thoughtful brow, he comes of an afternoon quietly to the old homestead gate in Punahou street. As is his wont he carries a bundle of books and papers under his arm, and as he comes up the long walk the September trees scatter golden leaves on his gray head; now a lowered shaft of the sun pierces the foliage, and he pauses and looks upward with illumined face, ere he passes within. We seem to hear his footsteps on the stair, and soon he enters his study clad for work, as one who never tires. For a time he paces along the book-shelves, dipping into a volume

here and there, turning the leaves lingeringly and lovingly. Then comes the unheralded inspiration, and, seated at his desk, he writes—and thinks—then writes again. The hours pass and he sits there with unseeing eyes; it is the period of introspection and composition, where the mind turns itself inward and views a new world, wherein the sense-perceptions have ceased to act. Suddenly a wild dove beneath the opened window calls loudly yet sadly to his mate, and the dreamer awakens with a sigh; he arises and stands, book in hand, near the window which looks on the College grounds. From their depths comes the answering “wood-note wild” with the soft aftertone which lingers on the ear. As the sad notes float on the air he lifts his noble face from the page and listens; then he smiles a strange sweet smile, but ere it passes the picture blurs, then vanishes—forever. No, we shall not forget, but shall remember through the years, and shall cry within our hearts, with the poet Shirley,

“Only the actions of the just
Smell sweet, and blossom in the dust.”

THE HAWAIIAN CONTRIBUTION TO ENGLISH.

J. M. LYDGATE.

THE English is a hospitable language. Maintaining commercial relations with the wide world, more or less familiar, at least superficially, with all peoples and languages, it extends a royal welcome to guests from the most distant stations: at its court may be found the uncouth savage from the latest commercial conquest, jostling the stately aristocrat of classic lineage.

That we should find in such a cosmopolitan court some representative of Hawaii is quite to be expected; it may be a matter of interest to note what they are, and how they come there.

To begin with, much to our surprise, the familiar words which we expect to find are missing, and others which we, here at home, scarcely know, these have found a place. *Mauka, makai, pau, pilikia, aloha*, these are words of accepted standing, locally—so thoroughly absorbed into our linguistic consciousness that we never think of scrutinizing them, of noting their foreign origin, any more than we do such words as *theater* or *envelop*. To us they

are so thoroughly naturalized in the language, that when we go abroad we use them as we do at home, forgetting that they may not be as familiar elsewhere.

Accordingly, it is a foregone conclusion that these words have been adopted—yet when we come to look for them in the dictionary—the latest edition of Webster—strange to say, there is no sign of them. With reluctant incredulity we come to the conclusion that Hawaii, after all, has made no contribution to the English language.

But accidentally we stumble on such words as *pili-kai*, *kukulu-ao*, *punaluan*, masquerading in the dictionary as English words, taken over from the Hawaiian, and in good standing. English words! Why, they aren't even familiar Hawaiian words! Not one person in a thousand, here in Hawaii, ever heard of *pili-kai*, or knows that it is a little sea-beach morning glory of insignificant appearance and no importance. Why should it be singled out and given a place in the world's great court of honor?

Kukulu-ao—whoever heard of that, or knows that it is the name of a long-legged water bird, occasionally seen in the salt marshes along the seashore?

Punaluan—does this suggest to anyone a peculiar kind of "off color" marriage once current in Hawaiian practice but long since extinct?

Yet these, and other words like them, strange and unfamiliar, have won an acknowledged standing, at least technically, in the English language, while such familiar words as *mauka*, *makai*, *pau* and *pilikia* are ruled out. Evidently the conditions of admission are peculiar.

Words are the tools of speech, and language is the vast storehouse, where these tools are kept in stock, ready for use. Every race has its own stock of such tools, some, of course, having a much larger kit than others. Coming to these Islands with our own vast kit of linguistic tools, built up through the ages, and enriched by acquisition from all races, we yet found certain linguistic tools in use among the Hawaiians which appealed to us as so useful that we dropped our own, and took to these, and we did so because of the handiness of them.

The English language has gone to great lengths in the special-

ization of speech. New distinctions of thought call for new forms of speech, and new forms of speech, in turn, react and suggest new distinctions of thought. So the language has grown into a storehouse of unbounded proportions, and bewildering perplexity, where the unskilled artificer is utterly at sea to know which implement to use. The poorer languages, like Hawaiian, have but a limited kit of tools, comparatively, and must needs put them to a more varied use. Accordingly, the Hawaiian makes his tool serve many purposes; makes his one word do duty where half a dozen, or even a dozen, are used in English. Of course, this generalization has its disadvantages, but it also has its advantages. A jack-knife, and a nail-file, and a screw-driver, and a corkscrew, are perhaps as a rule better separate, but there are times when it is a great advantage to have them combined; and this advantage is perhaps best described as "handy."

This is the commendation of these familiar Hawaiian words, which we have adopted locally—they are handy. They are available, each one, for a whole series of purposes, for which the English must pick and choose among several words, or they express concisely and neatly what the English can express but awkwardly and at length. Anything is a "*pilikia*" from a scratched finger to a broken leg, from a mislaid pencil to a lost fortune, from a fly in the soup to a famine in the land. It is a great convenience, when you are in a hurry, when you are in no mood to be critical and particular, when perhaps you don't yourself quite know what you want to say, or don't want to commit yourself too definitely—it's a great convenience to be able to lay your hand on some general word like this, and pass it out, naively leaving to the hearer the interpretation, and tacitly authorizing him to put as much or as little meaning into it as he likes. And then if, by and bye, he is inclined to presume upon what you have said, you correct him with the assurance that he has mistaken your meaning altogether: you meant two or three notches lower down in the series.

The familiar greeting "*Aloha*," for instance. How much more universally "handy" it is than our manifold and clumsy good-morning, good-afternoon, good-night, farewell, adieu, regards, respects, love, etc., etc. *Aloha* is at once more euphonious, and more suggestive. Is it any wonder that we have adopted it?

Mauka and *Makai* appeal to us in a different way. They meet the requirements of local condition. In small islands surrounded by the sea the important distinction is not East and West, or North and South, but toward and away from the sea. The climate, the landscape, the verdure, roads, supplies, civilization, in a word, the conditions of life, depend upon the distance from the sea, so seaward and mountainward are the cardinal relations of direction. For this relation the English has no concise and simple forms; the Hawaiian has *Ma-kai*, toward the sea, and *Ma-uka*, toward the upland.

Realizing the usefulness of these words, we, here on the ground, have gratefully adopted them, but our recognition has not, as yet, availed to secure their adoption on the broad stage of the general language.

When a new word comes into the open court of critical recognition, it must adduce some valid reason for its recognition. Language is like a central patent office of vast proportions, where countless caveats have been filed during the ages, and countless recognitions issued on the basis of distinction. And when a new word makes application, search is at once made in the linguistic archives, to ascertain whether there is not already in use some word which covers exactly the same ground. And if there is, the new word is very properly turned down—there are too many words in English already. Such may have been the fate of these particular words, *mauka*, *makai*, *pau*, *pilikia*, *aloha*, and others like them, to wit: *kuleana*, *luna*, *mauna*, *lei*, etc.—words which we have adopted, and without which we could hardly get along, but which have in some fashion their English equivalents.

But if, on the other hand, it be found that the new word describes a new conception, or covers a new relation, however minute the distinction may be, then the word is apt to find justification, and take its place in the great linguistic tool-chest: and that place it retains, even though it may not be called for once in a decade.

This must be the justification of such words as *pili-kai* and *kukulu-aeo* and *punaluan*—they describe things minutely different from anything else; *pili-kai*, a convolvulus slightly different from any other convolvulus; *kukulu-aeo*, a crane slightly different from

any other crane; *punaluan*, a marriage relation somewhat different from any other similar relation.

On some such basis, presumably, must stand a considerable number of other words more or less surprising, such as *a-a*, *pa-hoe-hoe*, *koa*, *koae*, *kukui*, *kolea*, *kahuna*, *pulu*, *hula*, *luau*, *poha*, *poi*, *limu*, *pali*, *pele's-hair*, *kapa*, *wahine*, etc., together with many other names of plants and fishes and birds such as are scarcely known outside of expert Hawaiian circles, or specialists.

One wonders how long these unfamiliar words may have to lie idle, waiting for the rare and critical artizan who wants just these words, and will take no others. Doubtless sometimes for a very long period, so that they must grow very rusty through neglect.

And one wonders, too, how long these words will be carried, as a sort of dead stock, before they are cast into the scrap-heap of the obsolete, for surely this is the ultimate fate of words like these.

Long-distance prediction in language is a particularly risky kind of prophecy, yet it would seem as though Hawaii is not likely to contribute to the English that which she might best give—some simple words of common speech, which may be so thoroughly assimilated that every trace of foreign origin may be worn away, so that they may take unquestioned rank among the noblest of their peers. Such words as may hold their own upon the mid-stream of current speech, and run no risk of being washed up and stranded on the shores of some linguistic eddy.

Rather, I am afraid, will her contribution be of that superficial and ephemeral character which will linger for a while in the shore-wash of the great stream, and then be cast up on the bank and left hopelessly behind.

So we may well question whether, at the end of a few generations, or, say, a hundred years, a single Hawaiian word will remain in current use in the English language.

LAHAINA, Maui, used to be noted many years ago for its fine sweet potatoes. These were of the Tombez variety, an introduction and successful cultivation of one Charles Oudinot, a celebrity of that restful burg some fifty years ago.

THE DEFEAT OF KAMEHAMEHA'S ARMY.

By AUGUSTUS F. KNUDSEN.

A hitherto hidden chapter of Hawaiian history.

IN THE ordinary history of the Hawaiian Islands the return of Kamehameha's fleet of war canoes to Oahu in 1796 is given as due to having met a gale of wind in the channel when they attempted to cross over to the Island of Kauai, the only island that Kamehameha did not conquer by force of arms. However, in the tradition of Kauai the story runs very much to the contrary, and the beach at Mahaulepu, where the battle took place, still shows human bones piled over a large area, uncared for and slowly disintegrating into their elements. These are the bones of Kamehameha's warriors, slain on that fatal night. The Hawaii legend runs to the effect that three canoes landed and after the fight made their escape, but the bones of thousands of warriors would indicate that many more than three canoes had landed there. According to one account, the fleet that left Waianae, on Oahu, consisted of eighty double war canoes, and as many of these were fifty feet long, of course they carried quite a contingent of warriors beside the paddlers. Each paddler was also a warrior. Naturally, the men of Hawaii have done their best to belittle this defeat. Let us proceed, however, with the account as given by some of the old men of Kauai who were boys at the time of the battle.

Kaumualii was king, though he was still a boy in his teens, but surrounded by wise and able counsellors and chiefs. At the time of the battle my authority, Puako, was a boy of twelve, and had already received the first rites under the Tabu that entitled him to bear arms and to wear the dress (*malo*) of a man. He was then under the strict obedience of the Tabu and was in training for the keeping of the records. This training he showed to a remarkable extent, having an unfailing memory. In 1854 he became overseer for Mr. Valdemar Knudsen, and continued in that office for some twenty-five years, and it was in an attempt to collect some anthropological specimens for the Smithsonian Insti-

tute, in Washington, D. C., that the occasion arose for him to narrate what he knew of the battle.

There are always skulls and bones of human beings uncovered by the wind on the sand plains of Mana, where the lazy Hawaiian found it easiest to dig a shallow grave to bury those for whom he had little affection. But when Mr. Knudsen endeavored to collect these there was great opposition on the part of the natives, because these were the bones of their ancestors, people of their own villages, and they looked upon it as a great sacrilege. Even when the explanation was that the white men wanted to study the crania of the aboriginal Hawaiian, they could see no use in it. "Why do you not go to Mahaulepu and take the bones of the Hawaii men there," says one, a village head man. "What is that?" asks my father. Says he, "The beach is strewn with thousands upon thousands of skulls and bones, but as the warriors are slain in battle, we have no care for them. They have lain there since the defeat of Kamehameha's army." And so Mr. Knudsen made the journey, visited the beach, collected five or six boxes of skulls and shipped them to Washington, and then asked the old man for the story, and this is the account of that battle as I got it from my father as a boy.

But in 1893 I had two or three of the old men gathered around and telling stories of ancient Hawaii, and again they told me the story, so that I got it direct from the lips of men who, while not participating in the battle, had participated in the excitement of the day and the thousands giving offerings in the temples when next day the victory was celebrated. Re-telling the story to my father, he remarked upon the wonderful memory of the old man, who had left out no detail of the story as he had told it in 1854.

There was considerable uneasiness in those days all around Kauai. Kamehameha's triumphal march down the group, conquering king after king, until he had conquered all but the king of Kauai, alarmed the whole populace. They expected sooner or later an attack. They saw that, flushed with victory, Kamehameha would attempt to conquer every corner of the group, and so for some time every warrior had been drilled carefully, and everything was in readiness, every man on the alert. Of course, it was taken for granted that the attack would be made on the

Kona coast, where there was smooth sea for the landing and where, in case of defeat, the canoes putting to sea would not have to battle with wind and wave. And so the outlook was posted on many a headland, watching for any possible attack.

The very first beach protected by the headlands of Kipu on which a canoe could land is the beach of Mahaulepu, and one night a lone warrior, standing on the bare sandhills, saw the white line of surf broken by a line of canoes. It was the invading fleet. There was a heavy wind blowing. He did not wait, but running as only a Hawaiian warrior can run, he gave the alarm to the village Olamuku; from this one the alarm was sent to all of the neighboring villages, each village carrying the message on to the one beyond. When the morning star arose the alarm had reached forty miles, to Mana; and through around the windward coast and up around the populous valleys of Hanapepe, Makaweli and Waimea. And the warriors were off. From Puako's village, Kaunalewa, famous for its coconuts, 600 men went off in the dawn, to travel as fast as they could the forty miles to the scene of battle, knowing that they were among the last ones notified and therefore, in all probability, would see nothing of the real fight. But in the gloom of the darkness before dawn, the chiefs, gathered at Koloa, decided that they had a sufficient force, for the warriors of Weliweli had reconnoitered and again reported that there were probably not more than six thousand warriors on the beach. And so the march was started and before dawn the attack made on the resting warriors, who had dragged their canoes above the reach of the high surf. Men were detailed, forty to each war canoe, to carry on their shoulders a stone, as heavy as they could possibly carry. These stones were to be loaded into the canoes as the Hawaii men tried to launch them. These men approached behind the first array of spear-men, and thus the line of battle charged upon the invading camp. For a short time there was tremendous resistance, but the Hawaii men were outflanked on both sides, and the Kauai men crowded in behind them, some of them even swimming in and attempting to surround them. They vowed that no canoe should leave that beach. Then the ranks broke and the order was given to launch the war canoes. Then the Kauai ranks opened, and the files of

men carrying rock on their shoulders were allowed to rush through and load up the canoes with rock. Some of the canoes had already been launched or were in the surf, and the rocks piled into the right-hand canoe and none in the left-hand canoe at once capsized the double war canoes. Swimming in the surf in the twilight of the morning, it was difficult to tell friend from foe. The surf carried the canoes back on the beach, and these, swinging up sidewise, would mow down dozens of men and crush them under their weight. Within half an hour chaos reigned in the ranks of the Hawaii men. The great war cry of Kalaipahoa rallied a few around the priests, chiefs and commanders. Kalaipahoa, the war god that had carried the standards of Kamehameha triumphantly through the battles of his conquest of the whole archipelago, was for the first time in danger. To lose that was to lose the kingdom; and probably the dynasty was then in peril. And so, surrounded by a dense wall of frantic, desperate men, three war canoes were launched and got safely beyond the breakers with the high priest, the commanding officer and Kalaipahoa. Several others then put to sea. Finally about one-half of the war canoes got away, about one-quarter were destroyed, and the other quarter captured by Kau-mualii. The beach was strewn with dead, and up among the sand hills were 543 prisoners, some of them with royal mamo cloaks on, showing that they were chiefs of royal rank, carefully guarded, to expiate the fury of the war god on the temple floor of Polihali. The battle took place between dawn and sun-up, and the retreating Hawaiian canoes were still plainly visible to the Mana contingent as they came over the highland of Weliweli and began the descent to the beach.

But the battle was over. They were allowed, however, the honor of being the bodyguard of the chiefs captured in the battle who were to be carried to their own village for the sacrifice to the war god of Kauai. Young Puako, with his kauila dagger in his belt and the short, light spear of a novice, had had the honor of standing guard with the old men, unfit for such distant active service, at the gate of the temple; and he saw twelve of Hawaii's finest walk into the temple, facing their doom, as warriors should, walking upright, alert, undaunted to the last. And so the war-

riors were distributed to all of the great temples of the island, that the blood lust of the people could be appeased, and for three days there was human sacrifice upon the altars. The first day twelve warriors, "Koa," and the next day twelve warriors of rank Alii, and the last and third day the climax, when the twelve chiefs of royal lineage were struck down upon the altar on the highest platform, before the image of the god of violence.

And so the beaten and discouraged remnant from Kamehameha's fleet landed on the beach of Waianae and reported that the gale had sunk half their fleet, and that the high priest had received a summons to return to Maui, where Kamehameha was. And they put on a bold front, because they were landing amongst a conquered people. And it was only three or four years since the terrible battle of Nuuanu precipice, where ten thousand skulls lay bleaching in the tropical sun. But Kalaipahoa did not stop at Maui. Through the Kaiauau they paddled, looking neither to the left nor to the right. Out into the boisterous channel again plunged the tired paddlers, struggling against wave and current, until they were safe under the lee of the Kohala mountains, and then quietly sped along in the night on the smooth waters of Kawaihae Bay, where at dawn the high priest carried his defeated idol up into its own temple in the lava flows of Kawaihae. Here the god could rest and fill his image with his power, so that the image went forth again to battle with all his original prestige. And so Kalaipahoa came back to Maui, and in the retinue of Kamehameha he went back to Oahu.

Thus Kamehameha failed to conquer Kauai, and he never again attempted it. And Kauai came into the union of the Islands by treaty; by peaceful absorption. The last of the great koa war canoes, cut in the forests of Hilo and Kau, still stood on the beach of Kikiaola in 1854, and was shown to my father as a relic of the event, but was no longer seaworthy. With the laced on running-board the canoe had a depth of forty-two inches. History tells us that some of these war canoes were as large as sixty-two feet in length. It would be impossible, however, to estimate how many warriors traveled in each canoe, and thus form an idea of the number of men in the expedition. The Kauai narrators differed, giving the figure of the dead as four thousand, others giving the

number of the Hawaii dead as four thousand. But from accounts told us that it was half the army that landed on Oahu that continued the voyage to Kauai, the invading force must have been at least ten thousand men, and it would not be so remarkable if four thousand of them had failed to embark under the conditions of the retreat.

The piles of bones along the beach give their mute testimony that there were a great many. There are more than a man would care to count in a day. But the Kauai warriors, too, are dead. Their spirit has died out of the people of today, but you will yet find an old man whose eye will twinkle with a strange light when he tells you that Kalaipahoa fled to Kawaihae because of the fierceness of the Kauai warriors, inspired by the war god of Kauai.

OUR new cover plate for this Fortieth Anniversary issue embodies several typical features characteristic of Hawaii's past and illustrative of her present diversified interests, and was the design of Mr. John C. Poole (for some past on the *Star-Bulletin* staff), in accordance with instructions to maintain these typical "ear-marks" of Hawaii-nei. We congratulate ourselves on his successful effort.

"TO MY great pleasure I find that Honolulu, though it has grown from a village into a commercial city, is still a place of beauty and in some ways even more beautiful than it used to be. After seeing many parts of India, South Africa, South America and the South Pacific islands, a can think of nothing in any of these countries lovelier than Oahu and the environs of the capital, and wish I could spend the rest of my days in a spot so favored."

—*A tribute from* HON. JAMES T. BRYCE.

FLATTERING.—"I have been in many parts of the world, but I have never yet visited a city that has so charmed me as Honolulu has."

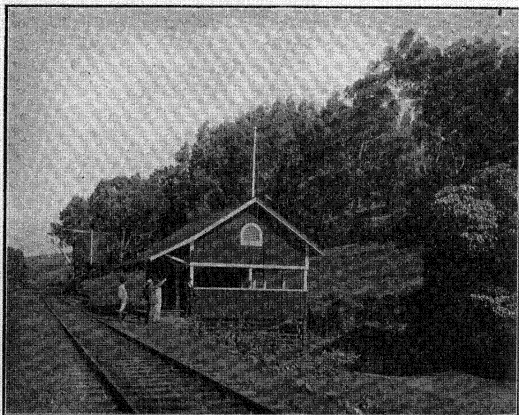
—LIONEL HALSEY, Captain H. B. M. S. *New Zealand*.

RAILROADING IN HILO.

By LORRIN A. THURSTON,

Vice-President and General Manager, Hilo Railroad Company.
With Views from Photos by Bonine.

[The completion of the railroad from Hilo into Hamakua, Island of Hawaii, one of the most highly developed, thickly populated and yet inaccessible portions of the Territory, marks such an era in the development of the Islands, that the publisher of the Annual asked Mr. Thurston, who has been connected with the enterprise from its initiation, to give a brief account of its scenic and commercial significance, resulting in this article.—T. G. T.]



THE completion, in May last, of the extension of the Hilo Railroad from Hilo to Paauilo, District of Hamakua, Island of Hawaii, a distance of 34.7 miles, makes it appropriate to summarize the growth and development of this enterprise since its initiation in 1899.

The assurance of stable government and of a duty free market in the United States for all Hawaiian products, incident to annexation in 1898, stimulated an immediate and remarkable business expansion throughout the Islands.

Within approximately eighteen months after annexation, new sugar, railroad, and other industrial enterprises were initiated, or existing ones enlarged, in Hawaii, involving an expenditure of over \$35,000,000.

INITIATION OF HILO RAILROAD.

Among these enterprises was the Hilo Railroad Company, it being granted a 50-year charter and franchise by the Republic of Hawaii, in March, 1899, which were confirmed by Congress and President McKinley in 1900. The charter authorizes the construction of railroads anywhere on the Island of Hawaii.

DEVELOPMENT OF SYSTEM.

The original intention had been to simultaneously construct a railroad both north and south from Hilo. Other parties appeared, however, and announced their intention and ability to build the northern line. The Hilo Railroad Company accordingly withdrew from that field, made its terminus at Waiakea, and proceeded in the fall of 1899 to build its tracks south from Hilo to Olaa, a distance of 8.3 miles, which point it reached June 14, 1900.

The road was thence extended to Kapoho, District of Puna, a distance of 25.1 miles from Hilo, reaching that point in April, 1901.

During 1901, the track was extended along the waterfront of Hilo to the Wailuku River, at the foot of Waianuenue Street.

The line was further extended from Olaa to Mountain View, a distance from Hilo of 18.7 miles, and later, on July 1, 1904, to Glenwood, a distance from Hilo, by railroad, of 25.3 miles, and nine miles from the Volcano.

HILO WHARF.

In 1902 a corporation was formed to build a wharf, 100'x800', at Waiakea. The corporation was unable to finance the enterprise, and it was taken over by the Hilo Railroad Company and completed in December, 1903.

During 1903 a short branch line was also built to the Hawaii Mill, in Hilo, and from the waterfront line to the new wharf at Waiakea.

FINANCIAL DIFFICULTIES IN 1904.

The chief business of the company up to this time had been with the Olaa and Puna sugar companies.

In 1904 the ravages of the leaf hopper on all cane, and the root rot, more particularly in Lahaina cane, the chief variety used on those plantations, combined with financial embarrassments, culminated, putting the Puna Plantation into the hands of a receiver and causing practical abandonment of the plantation for several years, while the output of Olaa was reduced nearly one-half. This caused a deficiency in the receipts of the Railroad Company which would have been disastrous had not Mr. B. F. Dillingham made advances to the amount of several hundred thousands of dollars, enabling it to tide over the interval; repayment of which advances were subsequently made in stock of the company.

During 1904, 1905 and 1906 the development of Hilo was at a comparative standstill, and the business of the Hilo Railroad Company at a low ebb.

A NEW ERA FOR HAWAII AND THE HILO RAILROAD COMPANY.

The year 1907 marked the beginning of a new era for the Island of Hawaii, more particularly for Hilo, and the Hilo Railroad Company.

When the new wharf was built in 1903, there were no oversea steamers running to Hilo, and the depth of water at the wharf, 24 feet, accommodated all vessels. Shortly after its completion, however, steamers drawing too much water to go regularly to the wharf were largely substituted for sailing vessels, and lightering was a continued necessity.

DEVELOPMENT OF THE BREAKWATER.

It became manifest that no radical development of Hilo was possible until two things occurred, viz.:

1. The construction of a breakwater, affording still water at wharves with full accommodation for ocean-going steamers;
2. The construction of a railroad from Hilo through the populous section north of the town.

Accordingly, in 1907, an appropriation for the breakwater was sought from Congress. The subject was a new one to that body, and special presentation of the subject and data relating thereto was necessary to secure prompt action. There was no Territorial appropriation available for the purpose, and other private individuals did not see their way clear to join in the project. The Olaa Sugar Company and the Hilo Railroad Company accord-

ingly undertook it alone, prepared the necessary data and, at their own expense, sent a representative to Washington, resulting in the adoption of the project by the Board of Army Engineers and an appropriation by Congress. Construction of the breakwater began in 1908, and has continued ever since. A length of 2650 feet has been completed; 3000 feet has in addition been partially constructed, and a contract to complete the second section and further extend the whole structure is now in course of execution. The completed portion of the breakwater protects wharves providing berths for three ocean steamers. When completed, the breakwater will enclose an area approximately three times that of Honolulu harbor.

EXTENSION OF THE RAILROAD NORTH OF HILO.

When the breakwater project was pending before Congress, opposition was made to the appropriation on account of the limited commerce then being transacted through Hilo harbor.

Assurances were thereupon made by the Hilo Railroad Company that, if the breakwater were constructed, a railroad would be built into the country north of Hilo and suitable wharf facilities provided under the lee of the breakwater. Such assurances had a material effect in securing the appropriation.

HAKALAU EXTENSION.

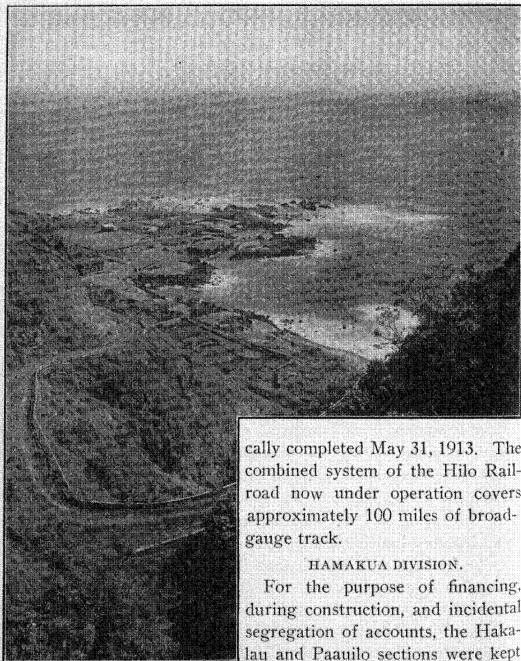
The construction of a railroad north from Hilo has been the dream of many during the past 25 years. Years of study and effort have been spent and fortunes and lives expended in the attempt.

In the spring of 1909, the fifth attempt to finance such enterprise had resulted in failure. The building of the breakwater was well under way, and it was decided by the Hilo Railroad Company to once more make the attempt to build north. A beginning was accordingly made in June, 1909, on a project to build as far as Hakalau, distant 12.7 miles. This section of the road was completed December 24, 1911.

PAAUILO EXTENSION.

In May, 1910, contracts were entered into with several plantations in North Hilo and Hamakua, and a million dollars of bonds subscribed for, which resulted in the beginning of construction operations to Paauilo, District of Hamakua, a distance by rail of

21 miles from Hakalau and 33.7 miles from Hilo. The surveys for this extension were begun June 28, 1910, and actual construction began on November 10, 1910. The extension was practi-



cally completed May 31, 1913. The combined system of the Hilo Railroad now under operation covers approximately 100 miles of broad-gauge track.

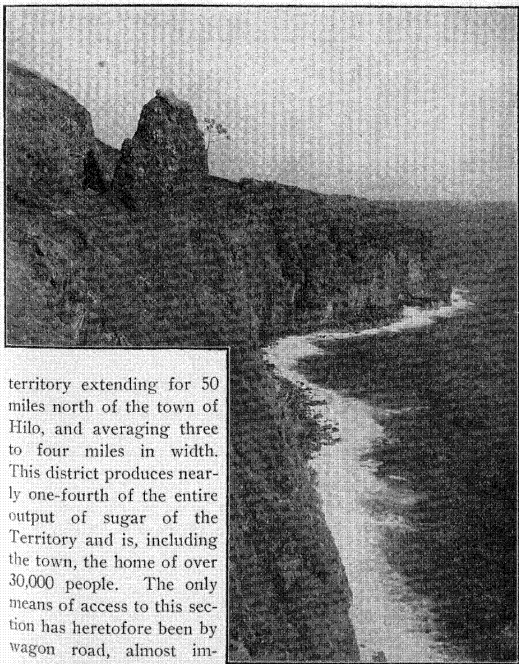
HAMAKUA DIVISION.

For the purpose of financing, during construction, and incidental segregation of accounts, the Hakalau and Paauilo sections were kept separate. Now that construction

is completed, there is no longer any reason for this segregation, and from the 1st of July, 1913, these two sections, from Hilo to Paauilo, 33.7 miles long, will together be known as the "Hamakua Division."

OBJECT OF THE EXTENSION.

The principal object of the extension is to give adequate transportation facilities between Hilo and the fertile and well-settled

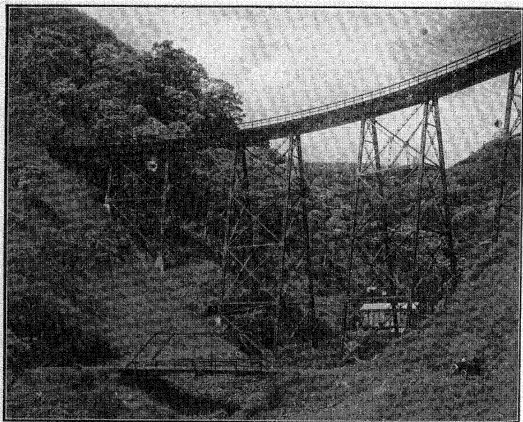


territory extending for 50 miles north of the town of Hilo, and averaging three to four miles in width. This district produces nearly one-fourth of the entire output of sugar of the Territory and is, including the town, the home of over 30,000 people. The only means of access to this section has heretofore been by wagon road, almost impassable in rainy weather, and by derrick and cable landings over bluffs rising from 50 to 300 feet sheer from blue ocean. There are no harbors.

REMARKABLE SCENIC ROUTE.

Incidentally, the road has opened up one of the most remark-

able, unique and spectacular scenic routes to be found in any part of the world. It may appear impossible for a railroad to run through a thickly-settled, highly-cultivated country and yet be noted for spectacular scenery. The paradox is explained by the fact that the district lies along the base and on the steep slope



HORSESHOE AND HAIRPIN CURVED BRIDGES.

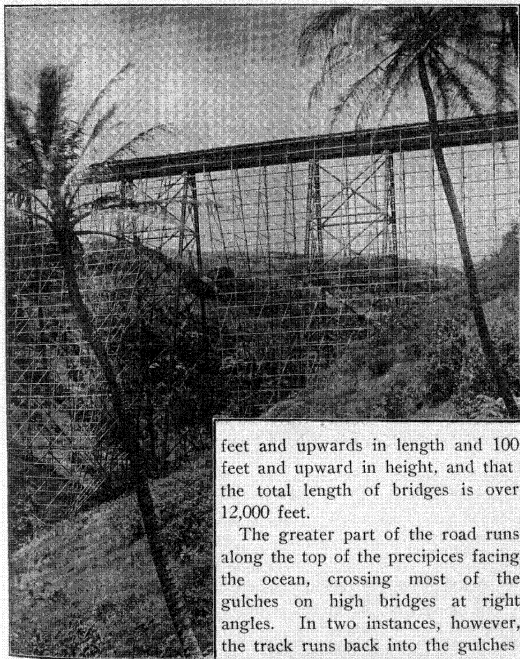
of Mauna Kea, the highest mountain in the Pacific, 13,825 feet high, terminating at the sea in a precipice ranging from 50 to 300 feet in height.

GULCHES, PRECIPICES AND WATERFALLS.

The rainfall of the district averages around 200 inches per annum. The combination of steep grade and heavy rainfall has resulted in excessive erosion, the mountain side being seamed at frequent intervals with deep gulches, in which the streams form innumerable cataracts and waterfalls. Many of these gulches have cut their beds down through the precipices to sea level. Others leap over the brink, forming waterfalls descending direct into the breakers at the base of the cliff.

Some conception of the rugged character of the country can

be gained from the fact that in less than 34 miles, there are 211 water openings under the railroad track, ranging from a concrete culvert to steel bridges up to 1006 feet in length and 230 feet high; that there are 14 steel bridges each of approximately 500



feet and upwards in length and 100 feet and upward in height, and that the total length of bridges is over 12,000 feet.

The greater part of the road runs along the top of the precipices facing the ocean, crossing most of the gulches on high bridges at right angles. In two instances, however, the track runs back into the gulches for a half mile or so, forming a "horseshoe curve" in one instance and a "hairpin curve" in the other, crossing on high steel curved bridges, one being on an 18-degree curve, the sharpest on the line.

In a number of instances the bridge foundations are below sea level, the surf actually dashing against the bridge towers.

In one case the road bed is cut, for a distance of 4000 feet, along the face of a precipice, which descends 200 feet, sheer into blue ocean, the rollers from the entire width of the North Pacific dashing unobstructed against the base of the cliff.

PALMS AND TROPICAL JUNGLE.

The gulches are filled and the cliffs thickly dotted with pandanus palms, breadfruit, cocoanuts, ferns and tropical jungle, which, interspersed at rapid intervals with villages, cane fields, giant sugar mills and waterfalls of all sizes and heights, presents a kaleidoscopic series of contrasts of the grand, the beautiful and up-to-date civilization and utilitarianism that is absolutely unique.

COST OF CONSTRUCTION.

The total cash cost of the extension has been \$3,578,022.18, equal to \$106,172.76 per mile. There has been no intervening construction company, the company building the road itself. The road has been financed chiefly on 6% bonds issued at 95, to the amount of \$4,500,000, including the refunding of a previous issue of \$1,000,000. All the bonds have been floated in and nearly all are now held in the Islands.

STATISTICS OF CONSTRUCTION OF HAMAKUA DIVISION.

The following statistics will give some technical idea of the character of the country traversed and of the engineering and financial difficulties which have been met and overcome:

Length of Line.....	33.7 miles
Weight of Rail.....	Hilo to Hakalau (12.7 miles), 70 lbs. to the yard; Hakalau to Paauilo (21 miles), 60 lbs. to the yard.
Gauge of Track.....	4 ft. 8½ inches (broad gauge)
Maximum Grade.....	Hilo to Hakalau (12.7 miles), 1.4% Hakalau to Paauilo (21 miles), 1.7%
Number of Water Openings.....	211
Number of Steel Bridges.....	14
Length of Steel Bridges, feet.....	6,604
Weight of Steel in Bridges, tons.....	5,609
Number of Wooden Trestles (including five combination of wood with steel girder spans, containing 161 tons of steel).....	29
Length of Wooden Trestles, feet.....	5,109
One Bridge of reinforced steel and concrete piers, with wooden super-structure, built through open ocean.....	384 feet long
Cubic Yardage removed from Cuts.....	2,309,000
Number of Culverts and Diverting Tunnels.....	157
Number of Tunnels, 3, of approximately 3100 feet in length.	

OTHER RAIL EXTENSIONS.

During the present period of development other rail extensions in connection with the old system have been built, as follows:

1. From Kapoho, Puna, to the Breakwater quarry, 1.47 miles.
2. From Kapoho to Kaueleau, Puna, in conjunction with the Puna Sugar Co., approximately 7.25 miles.
3. From Pahoa Junction to Pahoa, 60-lb. rail substituted for 35-lb. rail, 4.25 miles.
4. From Waiakea to new Kuhio Bay Wharf, in Hilo harbor, under the lee of the breakwater, 1.2 miles.

WHARF DEVELOPMENT IN HILO HARBOR.

Incidentally to the expansion of business at Hilo, and the Hamakua Extension of the railroad, the shipping facilities are being improved.

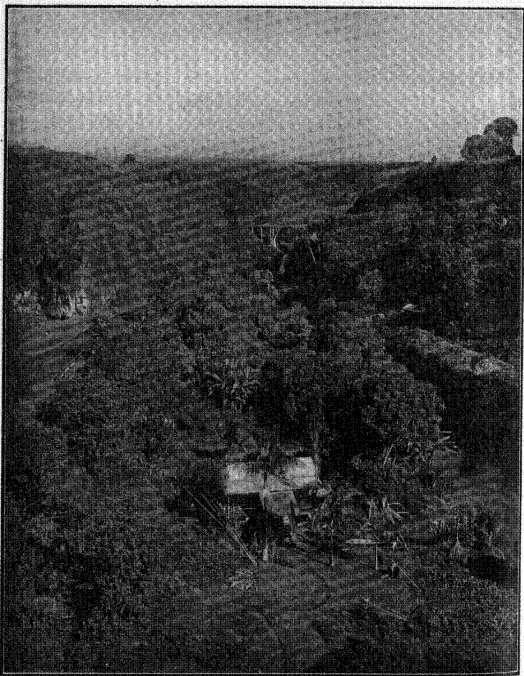
As soon as the breakwater construction was fairly under way, the railroad company secured a franchise from the Government to construct a wharf, 1400'x180', under the lee thereof, subject to the same being taken over at any time by the Territory, at cost. The company immediately proceeded to secure soundings, borings and plans for the wharf.

Before actual construction of the wharf began, the Legislature of 1911 appropriated \$200,000 for the purpose and took over the project.

This wharf is now completed, with a depth of water alongside of 32 feet for a distance of 1000 feet, and 20 feet for the remaining 400 feet. It is a most substantial structure of rock and coral throughout, with a timber facing 40 feet wide along the front. It is 1400 feet long by 180 feet wide, with double tracks and cross-overs, along the front, for direct transfer of freight between ship and cars; and double tracks and cross-overs down the center, in a sunken way between the merchandise and sugar warehouses, which brings the floor of the cars flush with the floor of the warehouses.

Separate warehouses for incoming merchandise and outgoing sugar, with electric machinery for handling the latter, are planned and will soon be erected.

By contract with the Government, the railroad company has free access to and over this wharf.



DREDGING ENTRANCE TO KUHIO BAY.

Although the entrance to Kuhio Bay is amply wide enough to pass ocean-going steamers, it is on a slight curve. Congress has, therefore, made an appropriation to straighten and widen the entrance. The contract has been let and the dredging is expected to be completed this fall.

THE FUTURE OF HILO AND THE ISLAND OF HAWAII.

It is difficult to predict the limitations of the future development of Hilo and the Island of Hawaii.

Without minimizing the beauties and advantages of Honolulu, the patent fact is that the chief superiority of the latter port over all others in the Islands has been its harbor—small, but perfectly protected in all weathers, while all others have been open roadsteads. This inequality is now in process of removal. Hilo will soon be in the possession of a protected harbor, much larger than that of Honolulu, and, without withdrawing any material portion of the business now centering at the latter port, will soon be in a position to add greatly to the oversea business of the Territory, and the mutual prosperity of the two communities.

The island of Hawaii contains over 4000 square miles (approximately the size of the State of Connecticut)—twice the area of all of the other islands of the group combined.

Hawaii is the only island of the group with large areas of fertile but uncultivated land. Under the stimulus of an increasing population; the growth of transpacific trade incident to the development of the Pacific Coast; the expansion of business in Asiatic countries, and the opening of the Panama Canal, the future of Hawaii, more specifically of Hilo, cannot be other than a bright one.

In this possible era of progress, expansion and development, the Hilo Railroad will necessarily play an increasingly important part, if its management and the people of the island recognize their mutual obligations and duties and act in that spirit of coöperation without which no community can progress—the one endeavoring to benefit its own interests best through promoting those of the community which it serves, by providing the best possible service at the lowest practicable rates; and the other by supporting the institution which, more than any other possible agency, will develop now dormant resources. With such a spirit of co-operation the possibilities are limitless.

CO-OPERATION AMONG FARMERS.

By E. V. WILCOX,

Special Agent in Charge, Hawaii Agricultural Experiment Station.

PERHAPS the most conspicuous fact to be observed in an ordinary farming community is the absence of unity and solidarity of interest among the farmers. Although the farmers of such communities live in the closest physical proximity to one another, they are as isolated and far apart as if they lived on different continents. The farmer has been too independent; each one in a given community has essentially the same problems to work out, but they have long tried to solve these problems strictly alone and without the assistance or counsel of their neighbors. It has often been felt that markets were not extensive enough to take all of the produce which could be raised in any particular community and that it was therefore best for the farmer who had partly succeeded in marketing his produce satisfactorily to keep the secrets of his business success, for fear that a similar success on the part of others might interfere with his market prospects. This point of view has proven a false and mistaken one in every community where it has prevailed. There is not a community of farmers in Europe or America today who are really succeeding in a business sense who are not organized coöperatively. The modern market for farm produce demands a large quantity of all food stuffs, and demands this material in a uniform condition and in a uniform stream of supply. No one farmer can maintain a constant supply of any particular article of farm production. It is impossible, therefore, for one farmer alone to maintain permanently the trade which he may possibly develop at any time when his crop is at his best. In order to keep a regular supply of any of the food stuffs produced on farms on hand in the local market, it is necessary for the farmers of each community to band coöperatively and to agree upon a rational program of procedure. They must agree in the first place upon the crops which it will pay them best to raise in their particular locality; they must agree further upon the particular variety of each crop to plant, and the times at which each of

the members of the community will plant, in order to extend the season of supply over the longest possible period, and to keep a constant supply on the way to market. It is necessary to combine coöperatively not only on account of the impossibility of otherwise occupying the market successfully, but in order to secure better rates for transportation, and in order to study together the practical details of modern marketing and the business end of farming.

Recently I have begun, for the second or third time in Hawaii, to assist in the establishment of coöperative associations in the different communities of farmers throughout the Territory. A few years ago the idea of coöperation did not strike the farmers favorably, and they did not appear to see the necessity of it. Now the great advantages of coöperation are appreciated, and farmers are enthusiastically taking up the idea of getting together for business and social reasons. The nature of coöperative associations in different communities necessarily varies with the nature of the crops produced and of the people who constitute the communities. The organization of coöperative associations may be compassed according to a very simple plan, with a few details specified in the constitution and by-laws of the association, or a much more elaborate plan of coöperation may be adopted by them. Usually there are at least two sides to the business part of the program, namely, the matter of coöperative buying of fertilizers, farm machinery, household furniture, staple groceries, and such other materials as may be needed by the members of the community, and the coöperative marketing of their produce. In coöperative buying they secure better rates from the dealers and from transportation companies, and more courteous attention on all sides. They are thus enabled to make a saving of from 10 to 25 per cent. on their materials which they have to purchase. In the first place, as already indicated, it is possible for a number of men to join hands in maintaining a constant supply of farm produce for the local market, and thus holding trade which would otherwise be lost if the supply were irregular. The only reason why such a large amount of food material is imported from California is that heretofore, and without coöperation among the farmers, it has been impossible for the local

dealers to depend upon the supply of the material which they needed, from local farmers. In shipping in large quantities the community secures better freight rates and better consideration from dealers and transportation companies than when each farmer operates independently. Another important advantage of coöperative associations in farm communities is found in the social side of the community. The frequent meetings of the members of the association give opportunity not only for the discussion of the business matters which should come before the members, but the enjoyment of various social programs which are provided by the committee on entertainment. The more inducements which are presented for getting together at the regular stated meetings, the larger the number of farmers who are present and the better the opportunity for the exchange of opinion about all sorts of things of interest to the community.

During the past three months six coöperative associations have been organized on Kauai, Hawaii and Maui, and the idea of getting together for business and social reasons has been taken up enthusiastically in all these six communities. In one of these communities there is a women's club affiliated with the coöperative association, which holds meetings twice each month. At these meetings all matters which concern the women of the community are talked over, together with various business and social matters of wider significance. The associations have been placed on mailing lists to receive the publications of the U. S. Department of Agriculture and of the various experiment stations throughout the United States. These institutions issue a large mass of literature, and each coöperative association will, therefore, gradually accumulate an agricultural library which will be of much use to the community. For a number of years there have been practically no farmers' institutes held in the Territory of Hawaii. The main reason for this apparent lack of interest in farmers' institute work was the difficulty of getting a sufficient numbers of farmers together in any community where it might be desirable to hold a farmers' institute. With the organization of the coöperative associations the problem of getting a crowd of farmers together upon short notice is a simple matter. The basis for effective farmers' institutes is therefore established. A num-

ber of men and women belonging to the staff of the U. S. Experiment Station, the College of Hawaii, Bureau of Agriculture and Forestry, and other institutions, have signified a willingness to address the members of the coöperative associations from time to time on subjects which are of immediate practical interest and importance to the community. The subjects which will be covered by the addresses of these men and women cover the whole field of agriculture, and include also matters of general science, literature, home economics, care of infants, etc.

The farmer has for ages been the butt of ridicule on the ground that he has no business ability, and merely trusted to the favors of Providence and nature to keep the wolf from the door. In the history of all coöperative associations the members of each association have found that it pays decidedly to attend to their own business rather than allowing someone else to do it for them, and to make a systematic study of the economy of crop and animal production, and of the business of farming in general. It is a curious fact that the average farmer has no conception of the cost of producing the various crops which he may grow or the animals which he raises for market. He has merely known at the end of each year that he was either ahead of or behind the game, as the case might be. By giving specific attention to the cost of production or by studying the various factors involved in marketing different crops he becomes aware of what are the profitable lines in which to spend his energies, and what are the reasons for failures in some of the things which he has previously done. He is forced to learn the demands of the modern market in regard to the uniformity of supply, the kind of crates or boxes to use for produce, the matters of sorting and grading his produce, and other features of marketing which so largely determine the appearance and attractiveness of produce when it is presented to the consumer. The farmer thereby gains definite information which enables him to make specific and just protests where he has suffered injustice, and to avoid making unjustifiable complaints where the difficulties and lack of success were entirely due to his own ignorance or carelessness.

Hawaii imports from the mainland each year produce, which could easily be raised here, to the value of about \$2,000,000. The

markets can be supplied with this material from local sources as soon as the rest of our farming communities become properly organized and develop business methods in growing and handling their produce. It is hoped that in the management of the local associations certain men with the proper business skill will come to the front, from whom later a few can be selected for carrying on the business of a central office, in Honolulu, of the various co-operative associations throughout the Territory. This sort of business and social coöperation on the part of our farmers is necessary in order that they should meet with the success required to produce a better quality of farm produce, graded more in accordance with the demands of modern market, packed more neatly, and delivered according to the demands of the market. The enthusiasm with which this work is being taken up by the different communities is extremely encouraging, and the prospects at present for the development of agriculture, which is the real foundation of prosperity in all countries, is brighter than ever before.

THE HAWAIIAN HOMESTEAD OF THE FUTURE.

By F. G. KRAUSS

IN HIS brief pointed address before the "Home Industries" section of the Civic Convention held in Honolulu, September 23rd last, Jared G. Smith called attention to the fact that on that day the last large body of public lands in the United States was being thrown open for homesteading. "* * * From to-day, when homeseekers and homebuilders look for lands they will have to look further westward, and in the course of the decades many of these will come to Hawaii and assist in the development of this magnificent Territory, along the traditional lines of American citizenship."

Whatever the significance of that epoch-making event in other directions, Hawaii's opportunity to settle her public lands with American farmers would seem close at hand. The occupation of a million acres of the best of our available lands by ten thousand American families, within a decade or two, is not an unreasonable

possibility. *But we must be as sincere in our efforts for its fulfillment as is indicated by our oft-quoted slogan, the "Americanization of Hawaii."* ✓

The vital questions before us now are: Will we do our share? and how shall we go about it? The writer believes that every one of us—state, corporation, individual—can and should help in the upbuilding and development of our agricultural resources along as near traditional lines of American citizenship as may be. That all forces may work together towards this common end, it will be necessary that we at least lend a sympathetic attitude towards the experiment.

An immediate and powerful impetus could be given to the homesteading movement if our great sugar interests would take the initiative in subdividing a part of their holdings into tracts of say, forty to one hundred and sixty acres, and offer to sell these tracts, with water rights, outright to desirable American farmers. Contracts could be entered into whereby the plantations would be assured of a definite acreage of cane, say one-third to two-thirds of the area formerly planted. This would enable the homesteader to practice a *rotation* of crops, which would certainly be *better farming* than that now practiced by the most advanced plantation management. That it would prove a good business proposition for the plantations under the present conditions of labor, there can be but little doubt; that there could be no recurrence of labor strikes of such magnitude as was experienced several years ago is certain.

With a common interest at its foundation, the moral and financial support of a powerful organization would come to the aid of the homesteader, the absence of which has in the past been one of the main obstacles in the way of peopling our lands with the more desirable class of citizenship. The idea is by no means new. Lorrin A. Thurston, in his notable address on "The Labor Situation in Hawaii," before the Social Science Club several years ago, dwelt at length on this solution of the then, as now, labor problem. As a matter of fact, a number of plantations have for years bought cane from small planters, but the scheme has apparently never been tried out in any but a half-hearted way. We are assured that in Queensland the characteristic feature of the

sugar industry is the number of small planters living independently of their holdings. There, it is said, "any thrifty white cane cutter can save enough out of his earnings in a few years to make a start for himself." In fact, many of the most successful small planters began with practically nothing. Land can be had on easy terms, as both the government and large sugar corporations are doing their utmost to settle a community of small cane growers on the land. To give an illustration of how successful some of these farming communities have become, it is reported that at Mackay over £500,000 worth of sugar, equaling a producing value of more than £500 per farm, was the product of about a thousand farmers. Now, modest as these earnings may seem to the average man in Hawaii, it is safe to say that there are 10,000 American farmers on the mainland today who would be willing to "pull up stakes" within a year and come to us if they had reasonable assurance of succeeding to the extent of the Queenslanders.

While it is true that our Hawaiian government has inaugurated a system of homesteading, the careful thought and consistent effort necessary to establish a rational and successful scheme of public land settlement has been wanting. However, the past year or two has witnessed an awakening in the right direction.

A number of tracts of favorably located government lands have been thrown open for settlement on each of the several islands. Indeed, in at least one instance has the plantation adjacent to one of these tracts offered settlers a like area on precisely the same terms as the government, and the offer has been accepted. This is certainly a step in the right direction. For the most part these newly-opened lands are of excellent quality and have been eagerly sought after. Also, be it said in passing that there is every indication that a successful beginning has been made in these new ventures. But the government has not yet done her whole duty. Too heavy a handicap has been placed on the pioneer. There are some things the government can do better than the homesteader. One of these is the laying out and the building of good roads. Another is to develop water for both domestic use and irrigation. A third is the establishment of good schools with a rural training for its base. A fourth is the establishment of demonstration farms. Lastly, but by no means least.

it is important that the government develop a sound system of farm finance. Europe, especially Germany, has shown us a way. To the young man with industry and initiative his personal credit should be equivalent to cash in hand. The advantages of co-operative buying and selling goes hand in hand with farm credits. The one helps the other. The disadvantages of the small farm would then largely be overcome. The advantages of the large plantation over the smaller has been mainly due to superior credit and business methods; not to higher unit production as many suppose. California offers a good illustration. By her great co-operative selling agencies, the small landholder sells for as good a price as the large holder, and to better advantage than the large holder if he tried to go it alone. His materials come to him at cost price, and the former advantage of the large owner is overcome. We have a counterpart in the sugar industry in Hawaii, perhaps developed to even a greater degree. Why not join forces with the small farm movement to mutual advantage? Someone says it *can't* or *won't* be done. Then let me say that in a small way it *has* and *is* being done! Some of the Haiku homesteaders have on different occasions purchased supplies to very good advantage through the plantation agencies. I understand they stand ready to extend such coöperation to all who apply. *Herein lies a suggestion that might be developed into a magnificent solution of our problem.*

Whether we do our part or not, the future agriculture of Hawaii will largely be made up of small farms and diversified agriculture. These farms will be owned by the man who tills the soil—the man who makes his home on the land. Unless we permit him to be the Oriental, he will be an intelligent, educated and prosperous, substantial and desirable American citizen.

It has already been pointed out, but will bear emphasizing, that the man who works for himself works best. Hired help rarely expend the energy or show the interest that will be put forth by the man who is working for himself. Nor will the tenant farmer make a proper use of the soil. Compare if you will the efficiency of our Oriental help at \$1 per day when he works for another with the work accomplished when working for himself. It is as two is to one.

Right farming involves diversified farming, and this results in a more intensive culture than is generally practiced. From the standpoint of permanent agriculture, this is the most economical farming. The one-crop farm or plantation is an extravagant institution, no matter how much money is derived therefrom for the time being; "soil robbery" is an appropriate title for such a system.

Live stock should form the basis of many of Hawaii's small farms of the future. No permanent agriculture can be developed without it. Fortunately for Hawaii's future farmers, live stock and its products offer a large direct income, while the by-product manure is the greatest single asset for the maintenance of fertility. Coincident with the importance of live stock production is the fact that the American farmer is characteristically a stock raiser in counter distinction to the Oriental.

Aside from her other natural agricultural resources, the perfect climate and beautiful scenery of Hawaii will not only attract, but hold her rural population when once established. This permanency, thus created, it appears to the writer, is a vital consideration in our future development. Our whole economic and social fabric will in time be changed. It may prove true that cash profits will become less under the new regime than they have been in the past—especially for the few. But what are profits? *Can money only be termed as such? or is there an equivalent in the purer, simpler, healthier, freer and happier life of the family transplanted to the farm?*

The small farmer we have in mind belongs essentially to that middle class, who have little desire for wealth, luxury or ease. He does not find the country barren, "because he knows that the dry clod of earth is pregnant with the possibilities of seed-time and harvest, of a full fruitage, of abundance and content for man and beast." And the farm home, plain though it may be, devoid of the veneer, a home that to the townsman seems plain, yet in these homes there abides virtue, intelligence, thrift and courage, and faith.

Would the change we are seeking be worth while? If you agree with us that the thing is worth trying, lend us your moral support. *This means a square deal.* Not pity or flattery, nor

charity or gifts of any kind. But simple justice, equal opportunity, and the best facilities for true education and development that the state can give.

Given all that we ask, we do not pretend that the homestead of the future will offer a rich field for speculation. The very term "homestead" is opposed to this idea. But we believe that in addition to all that has been claimed for the country life, here in Hawaii more than elsewhere, a fairly liberal income and financial reserve may be acquired by the industrious and persevering American farmer. We believe that our local market alone would afford sufficient income to support half of the ten thousand families we are seeking at the present time.

Dr. Wilcox, director of the Federal Experiment Station, in a recent address called attention to the large quantities of agricultural produce required by the regular army now stationed in Honolulu. He stated that they were anxious to secure the home-grown product if it could only be supplied in sufficiently large quantities, which up to the present has not been done. The single item of beef now imported from Australia amounted to \$1,998,041 for the year ending June 30, 1913. Where once the bulk of the beef product was range raised in the United States, it is now the rule rather than the exception to be farm grown. Four beef per annum raised on each of our 10,000 homesteads would just about balance the present importation, which is certainly on the increase. Of hog products, the statistics of the Department of Commerce and Labor for 1912 report that there was shipped into Hawaii from the United States \$71,000 worth. All of this could be produced by the small farmer at a profit. No other class of live stock thrive here as well as hogs. With the present demand and price (12 cents per pound on foot), many a mortgage would soon be lifted from the farm by this profitable animal. Of mutton we imported from Australia \$104,425 worth, and of veal \$34,400 worth. Of butter \$31,360 worth. Isn't it about time that the farmers of Hawaii should sit up and take notice? Poultry and game are shipped in to the amount of \$33,000, while the canned meat products exceeded \$100,000. The total value of dairy products shipped in from the United States amounted in 1912 to the large sum of \$458,228. Of eggs

we shipped in 154,914 dozen, valued at \$37,282. This latter item would be equivalent to an income of \$372 of pin money for a hundred farmers' wives, or, let us say, \$37 for each of one thousand farmers' daughters. Of course, not all of this is profit, but on the average homestead such as we have in mind a flock of two or three dozen "biddies" would require little or no outlay for feed. The little item of starch amounts to \$17,306. Four or five homesteads of 40 acres each would, under favorable conditions, produce the 400,000-odd pounds needed to bring in the sum stated, and raise \$1000 worth of hogs on the by-product. Tobacco products total \$762,466. While no one has apparently yet made money out of tobacco in Hawaii, it will eventually be done. That the best of quality can be produced here has been proved, but we must yet learn to cure a superior product. And, as we need farmers to farm, so do we need specialists to specialize, whether it be the culture of tobacco, cotton, or any other exacting crop. Most of our failures can be directly traced to lack of experience and lack of capital to gain the needed experience. It may surprise many to learn that of vegetables we shipped in from California something like a third of a million dollars' worth. The single item of potatoes amounted to \$158,109. And every bushel (about 60 pounds) represented a dollar's value. No better potatoes are grown anywhere than those that can be produced over a large area in this Territory. One hundred farmers specializing in this one crop could each secure a gross income of \$1,581 therefor. At a dollar a bushel one-half should be profit, in a favorable year, after paying freight from most Island ports. Of onions \$28,000 worth were imported. Much of our land is well adapted to this crop, and there are good reasons to believe a large export trade could be established in time. But it requires expert skill to grow the crop. There is therefore an opportunity for each of ten expert onion growers to produce \$2,824 worth per annum on each of ten 40-acre tracts. During the past year \$48,576 worth of dried beans and peas were imported. Conditions are ideal in Hawaii to grow these crops. The writer for three years in succession grew profitable crops of both green and dried beans twelve months in the year. Every Chinese gardener does the same on a small scale, and does it very

profitably. This is the type of crop that takes the free nitrogen from the air to enrich, rather than deplete, the soil, at least in that particularly essential and expensive plant food. Be it said in passing that this valuable quality is characteristic of the whole leguminous tribe, which constitutes many of our most valuable farm crops. It is with these crops incorporated into the rotations of our small farming schemes that will prove the salvation of our soil fertility, especially if the live stock end of the farm be not neglected.

Of horses and mules we still import \$285,000 worth. And this notwithstanding the fact that under the rigid rules of the army there were recently rejected only four out of eighteen Hawaiian-bred horses. Every homesteader must have some horses to work his farm. Let us say not less than an average of three. If two of these be mares, he should produce a foal a year. At this rate a thousand of our homesteaders could not begin to meet the present and probably ever-increasing demand. It will prove a great treat to our farmer sons if we turn over this department of the farm to them. And let me mention that it would be well and just to let them keep at least half the profits as an incentive for "better work and more of it." Or "breadstuffs," under which heading are classed grain, feeds, etc., the large sum of two and a third millions is reported. While we cannot produce at a profit some of the items enumerated under this heading, a conservative estimate would be at least a million dollars' worth. The items of barley, bran and middlings, amounting to \$1,235,781, can be wholly substituted by algaroba meal and alfalfa meal. That they have an equivalent feeding value is not only true in theory, but has been fully demonstrated in practice. Only another item need be mentioned to give a rough idea of the magnitude of our annual importations of agricultural produce. I refer to fruits, nuts and preserves, of which we purchase from California almost a quarter of a million's worth. Now, this roughly totals over \$3,000,000 worth of produce which the homesteader might produce for our immediate home needs. He ought to be given an opportunity to produce an equal amount of sugar in coöperation with our established interests, to say nothing of pineapples. This six millions per annum would give a working basis for our first decade

of real American homesteaders. By the end of the second decade we should be able to provide for the full 10,000.

While the cash income per farm as represented by these figures is not large, it offers a fair start for the beginner, who must cash in his living and the development of his homestead as the major part of his compensation for the first five years or so. Besides, every dollar earned from the farm and again used on the farm has double the value of the city-earned dollar.

It would appear fitting at this time and place to record somewhat in detail the actual working of a little advance guard in this movement of the "Hawaiian Homestead of the Future."

During the latter part of 1908 surveys were begun on the Kui-aha-Pauwela homestead tract in Hamakualoa, Maui, and completed in February, 1909. About a year later they were thrown open for settlement. The tract consists of 1,200 acres, and was divided into thirty lots, averaging 40 acres each. As has so often happened in the past, but little interest was provoked in placing these lands on the market. Local people did not recognize their opportunity, and the few who did take up claims soon relinquished them, so that finally only two out of the eight or ten who made original entry remained. During the latter part of 1911, a small group of Honoluluans became interested in the lands, and upon inspection found them so satisfactory that they added to their number other friends, both locally and in California, until all the available lots, some twenty-five in number, had been spoken for and the California Settlement Association was born, the vanguard of the new Hawaiian homestead of the future. Frequent meetings were held in Honolulu for the discussion of matters vital to the enterprise in hand. The earnestness that characterized the debates spoke well for the future of the undertaking. In the meantime, the Lindsay Settlement Association formed, and these latter have joined forces with the California Association. Our leases were forthcoming in April, 1912. Most of the settlers took immediate possession of their lands. Contracts were let for clearing and plowing, so that as early as June some had begun to plant their first pineapple plants. By October a dozen cottages were either completed or well under way. A hundred or more acres had been planted to pineapples.

Many had constructed fencing and some had developed a permanent water supply. No other crops were planted that year, but the active preparation of the land was continued, so that another hundred acres of land was plowed and planted by the middle of the present year. At this writing a half dozen settlers have each 20 acres, another half dozen ten acres each, and a third half dozen five acres each planted to pineapples. Nearly every homesteader has some live stock: work horses, milch cows, swine and poultry being included under this head. A grass patch adjoins nearly every barnyard, and a flower and vegetable garden adorns every cottage doorway. A modern little schoolhouse crowns the most prominent eminence, and a large attendance is enrolled. The first Hawaii Boys and Girls' Corn Club held its competitive exhibit last July. A farmers' club was formed in September, and regular meetings are held. Church services are held every second Sunday. A piano has been secured for the schoolhouse through the aid of Honolulu friends, and a rousing farmers' meeting and entertainment was held in October. The nucleus of an agricultural library has been supplied by the Federal Experiment Station, and this is constantly being added to. Also has there been established a branch of the Honolulu Public Library.

The construction of new roads is well under way, and the first gulch road will be ready for use before the main crop comes off in the spring of 1914. Already, two of the three original settlers have each harvested their first crop of pineapples and have done well in the transaction. It has been estimated that altogether some 500 tons will be harvested by the homesteaders during the coming year, representing a value of approximately \$10,000. So much for the present status of these New Era Homesteaders.

The writer has been asked so often the cost and estimated profits in pineapple growing in our district under homesteading conditions that he has prepared a prospectus, which follows:

ACRE UNIT COST OF PRODUCING PINEAPPLES AT HAIKU HOMESTEADS.

	Lowest.	Highest.
Clearing land of guava and brush ready for the plow....	\$ 10.00	\$ 50.00
Plowing land three times:		
Sod plowing 3"-4".....\$8.00-\$10.00	}..... 24.00	}..... 30.00
2nd plowing, 6"-8".....\$8.00-\$10.00		
3rd plowing, 8'-12".....\$8.00-\$10.00		
Harrowing or discing land twice after each plowing (six times altogether)	12.00	15.00
Smoothing and evening surface with weighted drag....	5.00	10.00
Pineapple plants, "tops," 10,000 plants per acre at \$5 per M.	50.00	.....
*Pineapple plants, "suckers" or "shoots," 10,000 plants per acre at \$10 per M. ....	.....	100.00
Planting 10,000 per acre.....	10.00	15.00
Cultivating crop with horse hoe, 18 Mos. at 75c to \$1 per Mo.	13.50	18.00
Hand hoeing crop with Oriental labor, 18 Mos., \$2 to \$2.50 per Mo.....	36.00	45.00
Harvesting crop of good yield (20 tons at \$1 to \$1.25 per ton)	20.00	25.00
Hauling to cannery of good crop (20 tons at \$1 to \$1.25 per ton)	20.00	25.00
<hr/>		<hr/>
Total cost of bringing first crop to market.....	\$200.50	\$333.00
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Gross income from first crop (15-20 tons at \$20 per ton)	\$300.00	\$400.00
Net profit or loss from first crop.....	33.00	199.00
Total cost of producing first ratoon crop (second crop from planting)	100.00	200.00
Gross income from first ratoon crop (15-20 tons at \$20)	300.00	400.00
Net profit from first ratoon crop (second crop from planting)	100.00	300.00
Total cost of producing second ratoon crop (third crop from planting)	100.00	200.00
Gross income from second ratoon crop.....	100.00	200.00
Net profit from second ratoon crop.....	.....	100.00

SUMMARY.

	Profits or Losses	
Total cost of producing plant crop (first crop 18 Mos. from planting), \$200.50 to \$333.....	\$ 33.00	\$199.00
Total cost of producing first ratoon crop, 12 Mos. after harvest of first crop, \$100 to \$200.....	100.00	300.00
Total cost of producing second ratoon crop (third crop after harvest second crop), \$100 to \$200.....	.....	100.00
Total net profit under present conditions from the three first crops, from virgin land, covering a period of three and a half to four years, may range from practically nothing up to as high as \$600, or, say, from coming		

* It should be noted that when shoots or suckers are planted the crop matures several months earlier than when tops (crowns) are planted. This usually compensates for the extra cost of the plants.

out about even to a maximum of \$170 per year on a three and a half-year basis, and \$150 per year on a four-year basis, in which one plant crop and two ratoon crops are produced.

In the above calculations, no interest has been charged on the investment, nor is any allowance made for deterioration of the land. To restore the land to its original fertility it should lie idle for a period about equal to the time it was kept under crop, say three to four years, representing a cash value of \$30 to \$40 for the period of non-production. Fertilization equivalent to this amount would probably strike a balance, but, better than either alone, a crop rotation might be worked out that would at least pay the rental and interest on the land during the period not planted to pines.

If the demand for pineapple plants should continue, quite a revenue might be secured from this source, ranging from \$50 to \$100 per acre, in addition to the income from the fruit. If we include this item it might properly be set against the interest on the investment and other fixed charges and about square the account.

Thus will it be seen that while the possible profits in pineapple growing are large, there is a wide margin for loss. Being an expensive crop in first cost towards production, good judgment and management count for much in the final profits. Profits cannot be reckoned on a basis of one year or even the three and a half or four years covered by each cropping cycle or unit. The reason for this is that few growers have thus far completed the second cycle of a cropping unit as profitably as the first. Neither fallowing nor fertilizing the soil after the first cropping cycle has been completed appears to have restored the soil to its original fertility. We believe the solution lies in a rational system of rotation in which has been incorporated a scheme of manuring, fallowing and fertilization. In other words, close supervision and an intensive culture such as only the "man on the job" can plan and execute, are essential to success. One cannot make the small farm pay from the fifth story of an office building, no matter how many Havana cigars one smoked.

While the first cost of establishing the home and crop, in the main, has been high, few of us realizing that it would require an expenditure of approximately \$5,000 to establish our homes and

bring our first ten acres to the harvest stage, it might have been done for less could we have foreseen some things that experience has since taught us. Doubtless we shall do better with each succeeding year, and those that follow us will have an easier time. But even as it is you will find few disgruntled homesteaders among us. A fine spirit of coöperation exists at every hand; "coöperation means faith in our future. It means ideals, ideals of rural possibilities. It means progress, progress that cannot be acquired in a marked degree by any of us single-hand." Therefore, we need coöperation. The coöperation of government, of established interests, of every individual who has the welfare of the whole community at heart.

In conclusion, let it be said that small farming in Hawaii, the farm of 40 to 160 acres is not a get-rich-quick scheme, but it is a legitimate business, and will in time become the Territory's greatest asset, because it will mean more and better homes and therefore a better citizenship. When properly conducted it will pay a reasonable and possibly a generous cash interest on the investment of capital and labor. The way to succeed is to be determined to succeed. There will be found some discouragements, especially until one has learned the business of farming, which, perhaps more than any other calling, requires experience and a knowledge of many things.

BRIEF HISTORY OF HAWAIIAN UNSKILLED LABOR.

*Read before the Social Science Club by W. W. Goodale, and
revised for the ANNUAL.*

THE census of the Territory, taken in 1910, shows that out of the total population at that time, 191,909, of all nationalities, 38,547 only were of Hawaiian birth and that 9832 of that number were adult males. Of these, 1074 were employed on the sugar plantations, 170 of whom were skilled men, mechanics, clerks and overseers.

The remainder, 904, were unskilled laborers and formed only 2 per cent. of the 43,701 laborers employed in the principal agricultural industry of the country.

The cultivation of rice and pineapples, the other important agricultural industries, employ few if any male Hawaiians, and even the raising of taro and the manufacture of poi, the staple food of the Hawaiian people, is largely in the hands of the Chinese. Portuguese and Japanese are taking the places on cattle ranches formerly filled by Hawaiians. The fishermen, and many of the sailors on the inter-island fleet are Japanese.

Little would be thought of this if large numbers of Hawaiian laborers could be found living in their own homes and regularly employed in the manufacturing industries, or in other lines of trade or as producers of commodities for sale.

That, however, is not the case, and Hawaiian unskilled laborers are, to a great extent, an unattached and irresponsible part of the community, with few family ties or common bonds of interest with the rest of their people except that of race and, for a few months every two years, politics.

To anyone who knows the people, likes them, is in sympathy with them, and remembers their numerical strength and influence in their own country a few years ago, the condition is sad and the future of the pure Hawaiian race, as a race, seems uncertain.

OUTSIDE CAUSES.

The causes of this are to a certain extent inherent, but to a much greater extent they are from outside themselves and due to conditions over which the Hawaiian people and their government have had little control.

They are today in many ways the passive victims of the rapid development of their own country and its resources by foreigners.

On the subject of the opening of foreign countries and their markets, John Arthur Hobson, M. A., says in a paper written for the First International Races Congress in London:

"Where savage or semi-savage peoples are concerned, the task of building up sound industries and wholesome wants, the two foundations of industrial civilization, will be slow and difficult and may involve a long retention of political and economic authority before such a country can be left entirely to its own control, consistently with its own and the world's welfare. But in spite of the obvious perils which accompany such protection and

education from the selfishness and greed, not only of traders but of governments, no other solution is possible.

"These people have no natural or inherent right to withhold the natural resources of their country from the outside world. There is therefore no other solution than the education among civilized states of a higher sense of justice, humanity and economic wisdom in the rendering of that assistance."

While the question as to whether or not a "people has a natural or inherent right to withhold the natural resources of their country from the outside world" is certainly open to argument, the remainder of the quotation can be aptly applied to the history of Hawaii.

WAS AND IS GOOD MATERIAL.

The native Hawaiian laborer was, and he still is, good material. He has contributed largely to the development of his country and his present almost complete elimination from the ranks of producers is an economic waste. The causes of this, as I have said, are partly inherent in the race, but not wholly, and in justice to them it is necessary to study the history of the country and its people during the past century.

In the last ninety-three years (a long human lifetime) that have elapsed since the arrival of the first missionaries, there have been many radical changes in the circumstances and customs of the people.

There has been a great change in the nationality of the men employed in agriculture and the trades, and the labor system has passed through many phases, from slavery, or enforced and unpaid labor, to freedom and a wage system. These changes have taken place during five periods of time, each as it passed showing marked differences in the prevailing system from that of the preceding, but each merging almost imperceptibly into the next. In retrospect, however, the lines of division seem sharply drawn.

To a student of the history of labor, wages paid, the treatment of working people and their standing in the community in which they live, each of these periods deserves careful study, but in a paper of this kind they can be merely touched upon.

FIRST PERIOD.

The first period commenced before the arrival of foreigners and continued down to, and slightly after, the arrival of the first missionaries, say about the year 1830. We do not know what changes and adjustments had taken place previous to that time that resulted in the working system found here by foreigners in 1820. But it is enough for our purpose to say that the system of society, government and labor was of the feudal type, based, as was the feudal system of the old world in the middle ages, upon the ownership of land, and no better examples of this can be found than existed in Hawaii.

The common people held no property in their own right. The products of their labor belonged to the chiefs. They had no personal holdings of any kind, and their time, their women and children, and even their lives, were held at the will of their chiefs. Laborers received no pay for the work they performed for others, and rendered compulsory service to the king, the chiefs and their agents, whenever called upon to do so. In return for their work, and only so long as they remained loyal and subject to call for labor and for service as warriors, they were allowed the use of small tracts of land on which to raise their food, and were given rights, in common with others, to certain fish, fruits and other products of sea and forest.

Those who were skillful in the arts, such as canoe making, received greater rewards and more extended privileges than the ordinary unskilled laborers, and fighting men who distinguished themselves in the frequent wars were no doubt suitably rewarded.

ABJECT CONDITION.

The condition of the common people, however, was abject, and the "good old days" often alluded to feelingly by strangers as the golden period of Hawaiian history, before contact with foreigners, and particularly the missionaries, had corrupted their manners and their morals, were so far as the common people were concerned, as purely imaginary as must have been the "Merrie England" of song and story to the lower stratum of English society of those days.

Of this period of Hawaiian history, David Malo says:

"The condition of the common people was that of subjection to

the chiefs, compelled to do their heavy tasks, burdened and oppressed, some even to death. The life of the people was one of patient endurance, of yielding to the chiefs to purchase their favor. The plain man must not complain. If the people were slack in doing the chief's work, they were expelled from the land, or even put to death.

"The people held the chiefs in great dread. It was from the common people that the chiefs received their food and their apparel for men and women, also their homes and many other things. It was the *makaainanas* (common people) who did all the work on the land, yet all they produced belonged to the chiefs. The country people lived in a state of chronic fear and apprehension of the chiefs. It was a life of weariness, constantly burdened by one exaction after another.

"There was no thrift, people were often hungry and would go without their food for days. The people about the court were bold and impudent in speech, there was hardly anyone about the court who did not practice robbery, and who was not a thief, embezzler, extortionist and a shameless beggar. Nearly everyone did these things."

This strong language is not used by a historian writing of a country and a people of the dim past, but by a man who was born twenty-seven years before the arrival of the first missionaries, and who was brought up in the customs and knew the daily life of those days.

OPPRESSIVE KAPU.

Besides the tyranny and oppression by the chiefs and their agents, under which the common people lived, all the people, the rich and powerful to some extent, but more particularly the poor and dependent, were subject to an elaborate *kapu* system that governed their daily life and habits. It affected the time and manner of doing the simplest acts, their food and their relations with each other, and imposed arbitrary rules of conduct and severe penalties for violating them. This *kapu* system, while intimately connected with the religious beliefs and fears of the people, bore directly upon the labor system and the relations of the common people with their superiors in wealth and position.

The visits of Cook and Vancouver, and intercourse with traders

during the early years of the nineteenth century, while giving the Hawaiians some experience with the forms of civilization, caused little change in the daily life and primitive customs of the people. Firearms had been introduced and they had learned the value and use of iron and other metals. The sandalwood trade had been developed, but the labor system remained unchanged, and it was the system as described by David Malo that the missionaries found upon their arrival here in 1820.

From this time on, changes in the life and habits of the people came rapidly.

SECOND PERIOD.

The second period in the industrial history of the Hawaiian people, 1830 to 1860, resulted in great changes in the character and ambitions of the people and a complete change in the labor system. The influence of missionaries, teachers and other foreigners, then rapidly increasing in number, and the force of their example in industry, changed in many ways the ideas of the people, gave them self-respect and developed in them traits of character that the old life had left dormant. Foreigners of all kinds, whatever their motives may have been, were, consciously or unconsciously, the instructors of the natives of all ranks and all ages, from the king to the humblest peasant.

This period of thirty years may be considered that most favorable to the native Hawaiians. It was a formative period—a period of instruction in civilized arts and ideals; and with the awakening of the people to the knowledge of their own powers and their rights, there was also a fostering care almost paternal in its nature from the king, the government, the foreign population and from the governments of the United States and England.

CONSTITUTION GRANTED.

Constitutional government was established. The motto placed upon the coat-of-arms, “*Ua mau ke ea o ka aina i ka pono*” (the life of the land is established in righteousness) and the earliest laws that were passed are evidence that the new government was based upon the high ideals and aims of life of its founders and the advisers of the king.

The powers of the chiefs were curbed and they voluntarily surrendered many of their old rights and privileges. The land

system was established, and the common people were given the right to own land. Laws were passed making it easy for them to do so. Prices were made low and deferred payments were allowed. The necessary formalities for acquiring land were made simple and inexpensive, and there were no requirements as to future residence or non-alienation.

The people were encouraged and even urged to buy land, to have settled homes and to live upon their lands and cultivate them without fear of losing their crops or other fruits of their labor to the chiefs or head men. They began to own cattle, horses and goats, but as these animals required large areas of land for their support, they were allowed by the chiefs who owned the large lands, to run in a common pasture, subject to some restrictions.

The benefit to the nation resulting from having a large population residing upon their own lands, and engaged in agriculture, was strongly urged by all foreign residents who had the good of the people at heart, and by the missionaries particularly, and was fully appreciated by the king, Kamehameha III, and by the leading chiefs.

The report of the land commissioners, William Richards, John Ricord, J. Y. Kanehoa, John Ii and Z. Kaauwai, dated December 10, 1845, says:

"The Hawaiian rulers have learned by experience, that regard must be had to the immutable law of property, in things real, as lands, and in things personal, as chattels, that the well being of their country must depend essentially upon the proper development of their internal resources, of which land is the principal, and that in order to insure its proper cultivation and improvement, the holder must have some stake in it more solid than the bare permission to evolve his daily bread from an article to which he and his children can lay no intrinsic claim."

THE NATURAL LIFE.

An agricultural life was the natural life of the Hawaiians. It was the kind of life that the first missionaries knew, and from which they came, that of the early years of the nineteenth century in the older Eastern States. It was an essentially rural life, when cities were small, few in number, and far apart. The villages were small communities built around the churches, town hall and

stores as a center, and where lived the clergymen, the few professional men, the mechanics and tradesmen. It was a country of farmers, and even the lawyers and doctors had farms of their own, producing in many cases the larger part of their incomes. The blacksmiths, carpenters, painters and wheelwrights had farms on which they worked when not busy at their trades. The wives and daughters of these men kept their homes and in them did much of the work now done on a large scale in factories. They made the cloth and the clothes worn by themselves and their families. The farms supplied nearly all the necessities of life. The sons grew up to, and followed, as a rule, the trades or professions of their fathers, and took the same places in the life of the community.

It was such a life, and such customs, that the missionaries brought to Hawaii and grafted upon the life of the people here, and at first with much success.

A FEW SURVIVALS.

After the adoption of the land system, about 1850, there came a period during which a large number of the people acquired and lived upon homesteads or farms that they owned. The results of their education along such lines could be plainly seen twenty or thirty years ago, and to a small extent now in the houses and lands owned by the older generation of Hawaiians that is now rapidly passing off the stage. These places can be found in nearly all parts of the Islands. They stand upon the lands still owned by the original patentees or their sons. They have been the homes of their owners and their families for many years. They are comfortably furnished, there are pictures on the walls, the family Bible holds the place of honor on the center table, there are newspapers that are carefully read, the older members of the family are neatly and plainly dressed, and they form the main support of the churches of which they are the faithful attendants.

The older men, from sixty to seventy years of age, may still be seen working in their taro patches; they know the proper time for planting crops. The older women are skillful with the needle and in other domestic arts. They make hats and matting from fibers prepared by themselves that are of fine texture and du-

nable. They are good housekeepers, careful of money and ambitious for their children.

These people speak with scorn of the slovenly habits of some of their own people and foreigners. They speak of the children of the missionaries with whom they grew up, by their first names, and of the missionaries themselves and their teachers, with affection and respect. The owners of these homes are the men who have been in nearly all cases on the right side of social questions and in politics.

It was from such homes that the first generation of plantation and other laborers went out, and they have never gone back to them. Many of the homes, after the death of the original owners, have gone into decay, or into the hands of foreigners, or have have dismantled to make room for cane fields.

ARGUMENT AGAINST HOMESTEADS.

In the history of these homes and farms may be found one of the strongest arguments against the present system of small homesteads. Successful homesteading of lands to build up a country and a permanent population is possible only in a new and undeveloped country where there are large areas of cheap and unimproved land and where crops can be raised at first, under natural conditions. The homesteads or farms must be large enough in area to allow for future subdivisions so that it will not be necessary for the younger generations to move away because there is not room for them in the community. Any plan for establishing a permanent population on lots of a few acres each is not true homesteading, and has in itself all the elements of failure.

MODIFIED FEUDALISM.

In the earlier years of this period, there still continued in force a modified form of the old feudal labor system. With a civilized form of government there came the establishment of royalty and other requirements of the nation that must be paid for. For such purposes it was necessary to raise money by taxation and there was also a labor tax for the government. Labor was still required of the people for the king personally and for the chiefs. Men were compelled by them to work in their taro patches, or in other employments, one day out of five or one day out of seven, or a certain number of days each month, for which they received

no pay. This was finally recognized as an evil, and questions as to its effect upon the people were addressed to the missionaries in an official enquiry by Hon. R. C. Wyllie, minister of foreign affairs, in May, 1846.

Rev. Mr. Hitchcock replied as follows:

"From what I know of the people I can say that had they the usual inducements to industry, they would become industrious and happy. They can never become so while one-fifth of their time is required by the government."

Rev. L. D. Maigret, afterwards Bishop of Arathea, said:

"Abolish the labor tax which makes the natives a nation of slaves, a people without hope of future amelioration, disinclined to labor and without any energy or industry."

Rev. Mr. Emerson said:

"I think two things are necessary to make this people industrious and provident: First, the feeling that the land is their own, for themselves and for their posterity; second, the feeling that the land is of real value, and capable of being improved in value, and that all improvements are private gain. But this is impossible so long as one-half of every man's time is required by government, to be paid as a tax to the nation and to the landlord together. I say one-half of the time, because, during the week that a man is required to work three days as a tax, it takes him the other three working days to cultivate and cook his food for those working days so that one-half of his time is demanded by government."

GROWING DEMAND FOR LABOR.

During this period, the foreign population of the Islands rapidly increased, and their presence and influence stimulated the development of new kinds of business and diversified farming, such as the growing of cane for the manufacture of sugar and molasses, the cultivation of rice and the manufacture of castor and kukui oils. Corn, wheat and beans were raised for the use of foreigners residing here and for sale to the whaling and trading ships that had begun to come here in large numbers. With the growing industries, there was a demand for reliable and industrious laborers greater than the apparent supply.

At about this time there occurred the interesting episode in

Hawaiian history known as the Belgian colonization scheme. This was based upon a lease to Messrs. Ladd, Brinsmade and Hooper by the king and government, of all the unoccupied lands of the kingdom for a term of one hundred years. The plans of the company were comprehensive and carefully worked out. They began work at Koloa, Kauai, and made contracts with several planters to raise cane and other crops.

King Kamehameha III agreed to cause to be planted fifty acres of cane near every mill that might be established by the company, and others, including Hawaiians and foreigners, made similar contracts. The sugar made from cane so raised was to be divided, one-half to the mill and one-half to the planter. Laborers were to be employed at just and equitable rates. Business men and others who were anxious to develop the country quickly and for the greatest profit to themselves, considered the Hawaiians, who were then the only available laborers, and probably numerous enough for any ordinary purpose, as inefficient and unreliable, and they believed that there could be no real development of the resources of the country, and no inducement to capitalists to bring money into the country, unless there could be brought about the immigration of a large number of people accustomed to work and willing to do so.

COMPULSORY LABOR.

Mr. Godfrey Rhodes, in a letter to Mr. Wyllie, written in June, 1847, says:

"It is a fact pretty well known at present that the natives have a very strong disinclination to labor, which appears in many cases almost insuperable. I would suggest to you with all respect, whether this might not be overcome by the adoption of some plan similar to the following: That a law should be enacted by which all the male population, from the age of fourteen to twenty years, should become the wards of government, who would apprentice them to different trades or occupations, as each should choose; that the persons so receiving them as apprentices, should pay a moderate annual tax for each, to the government, as well as wages to the apprentices, in proportion to his usefulness."

Mr. Thomas Brown, also in a letter to Mr. Wyllie, said:

"With the same number of men I now employ, I could in Eng-

land, have accomplished, in one-fourth of the time, more than I have now got through. * * * I have no difficulty in keeping up my complement of men. * * * Of course, there is a great difference amongst them, but generally speaking, they are neither stupid nor unskillful, when they choose to exert themselves, and I find that the middle-aged men are universally the best. * * * Now with respect to the introduction of foreign laborers, the chief difficulty appears to me to be the high price of food. * * * But I imagine that the advantages of their introduction would be great, to any planter who had a sufficiently large capital to meet the outlay."

FIRST IMMIGRATION PLAN.

The king was persuaded to endorse the plans of Messrs. Ladd & Co., which included the colonization here of large numbers of Belgians, and Article 3, of the agreement with Ladd & Co., is as follows :

"The said party of the first part (Kamehameha III) authorizes the said party of the second part (Ladd & Co.) to introduce into the Sandwich Islands, persons of various vocations, of whom the government of the said Islands shall determine the number and quality, and to each person thus introduced he will convey in full property, lands from those embraced in the contract with Messrs. Ladd & Co. * * * He further agrees to accord to all such persons thus introduced, all the rights, privileges and immunities, both civil and political, which are allowed to native-born subjects, these grants and privileges to be conferred on the condition of their naturalization, according to the established usages of European civilized nations."

This agreement was entered into in 1843, and was the first attempt on the part of the government, to establish a homestead system, and an agricultural population, that would become producers of wealth and develop the country. Great hopes were held of the success of the scheme, and many of the responsible residents endorsed it.

Messrs. Tinker, Lafon and Gulick wrote to Ladd & Co. in 1840 urging the erection of an additional mill at Koloa because the natives were turning more and more to the cultivation of cane, and they say :

"We trust that the success of your enterprise here thus far, justifies the enlargement of your operations, and that if the recompense in a pecuniary way, is insufficient, you may find a reward in the industry which it has awakened and gratified in this portion of the nation."

Rev. Messrs. Lowell Smith, Knapp and Bingham, and Messrs. Chamberlain, Castle, Dimond and Cooke, wrote to Ladd & Co. as follows:

"It gives us pleasure to state to you that we believe the direct influence of your factory will be salutary in its effects upon the native population of these Islands. * * * We consider such establishments as yours * * * as highly important to the best interests of this nation in the promotion of industry and virtue, and of the development of the resources of the country.

EXPERIMENT FAILED.

The plan of Messrs. Ladd & Company for the development of the country under their lease, and for colonizing the lands with Belgians, came to a sudden end. For about ten years thereafter, the only available labor for development of the country was that of the native Hawaiians. Several small sugar plantations had been started, and in addition to the sugar and molasses for local consumption, small quantities were made for export. In 1837 two tons of sugar and sixty-five barrels of molasses were shipped out of the country, but the industry grew slowly and even though stimulated by the growing trade with California, in 1860, the last year of this period, only 722 tons of sugar and 2600 barrels of molasses were exported.

FIRST CHINESE.

Even with this slow growth of the sugar industry the shortage of labor was keenly felt in the districts where cane was raised for milling, and in 1852 a small shipment of Chinese laborers was sent for.

Natives, however, still continued to be the main source of supply, and they became more efficient and reliable as laborers, teamsters, mill men and mechanics. The inter-island schooners and steamers were manned by Hawaiian sailors; and with the help of the natives in all lines of work, it would seem that, on the whole, the country was being developed slowly, but in a healthy way.

The wealth of the country was increasing, and it was fairly well distributed.

There were many sections of the country, however, where sugar was not made, and where large numbers of Hawaiians lived quietly, engaged in fishing and cultivating their own crops according to the old method of agriculture. The life upon which the nation had entered was, on the whole, a good life, and if it could have lasted for a hundred years longer without the intrusion of busness on a large scale that preceded and followed the Reciprocity Treaty with the United States, the Hawaiian people might have developed fixed habits of industry, sobriety and strength of character that would have saved them as a nation.

The Hawaiians during the thirty years between 1830 and 1860 probably reached the highest point in their history as a nation, and were more progressive and happy than they had ever been before or were destined to be again. With the year 1860, closed their best and most hopeful era.

THIRD PERIOD.

The third period is the sixteen years commencing with the decline of the whaling industry, and ending with the enactment of the Reciprocity Treaty in 1876.

The capital and labor formerly employed in whaling were diverted into other channels, and were naturally turned toward the sugar industry.

The Hawaiian population then numbered 67,084, of whom 21,275 lived on Oahu. Up to this time, the laborers and many of the mechanics, such as coopers, carpenters, blacksmiths and sugar boilers employed on the sugar plantations, were Hawaiians. Chinese had been brought here to help supply the growing demand for labor, but they were so few in number relatively that Hawaiians were the main source of supply for all purposes. Those not employed on plantations, ranches and ships, were the farmers who raised taro for their own use and for supplying those in other industries with their staple article of food; they were the fishermen also along all the coasts. Others were employed in the smaller industries, such as the gathering of pulu, of which 369 tons were exported in 1862; fungus, 189 tons of which were ex-

ported in 1863; coffee, 155 tons in 1865; and salt, 2513 tons in 1870.

With the development of the sugar business, however, more plantations were started, some of them on unimproved or even waste lands that had no resident population from which to draw laborers. Hawaiians would not go willingly to places distant from the sea, where the water for bathing was limited, and where there was no local supply of taro. The favorite places were those like Lahaina, Koloa, Wailuku and Waihee, where there were large numbers of people living under natural conditions.

COMPETITION AND CONTRACTS.

The starting of new plantations, however, created a demand for labor in excess of the apparent supply, and this resulted in great competition between employers for men. Recruiting agents were employed by the plantations, and as they received a fee for each man secured, men were enticed away from one plantation to another by the payment of higher wages or by means less honorable. During this period there was a great development of the labor contract system under the Masters and Servants Act. This system was not, apparently, repugnant to the Hawaiians, as it was merely an extension to service on land of the custom of shipping for service at sea, with which they were familiar, many of them having been sailors in the whaling fleet. When a sailor engaged for a voyage he received an advance of wages, nominally for the purpose of buying an outfit of clothes, or to leave with his family for their support; and when the custom of shipping for a term of years on land was adopted, the laborers asked for and received an advance of wages to be worked out as a debt.

In order to get men for the plantations, the shipping agents or runners would go about the islands to recruit men, and tempted by the promise of an advance of money with which to buy some necessity, a horse or some other extravagance, men would leave other employers, or their homes in the more secluded valleys, to work as shipped laborers on the sugar plantations or cattle ranches. Men convicted of crimes or misdemeanors in the courts, and unable to pay their fines, would be offered employment by a runner who would pay the fine as an advance, or loan to be worked out on the condition that the man would ship as a la-

borer. Notwithstanding all the efforts made to induce the Hawaiians to work regularly on the sugar plantations, there were not men enough available and it was found necessary to send for more Chinese. Japanese were brought here also.

CRIME OF CONTRACT-BREAKING.

All foreign unskilled labor came here indentured, or under contract to serve for a term of years, at stipulated rates of wages and hours of labor. These contracts were entered into under the Masters and Servants Act. The law provided means of enforcing the contracts by fines or imprisonment, or both, for violations of the terms of the contract by either party, the employer or the laborer.

Violations of these contracts on the part of the laborer were of two kinds—*haalele hana*, or desertion, and *hoole hana*, or refusal to obey orders. A man who wilfully absented himself from the service of his master could be arrested by warrant, tried by a justice, ordered back to work, and compelled to serve double the time of his absence (but not more than one year after the natural expiration of his contract). If a man refused to serve, he might be committed to prison until he would consent to serve according to the law.

For a second offense, either desertion or refusal to work, he might be sentenced to imprisonment at hard labor for not to exceed three months, and, at the expiration of his sentence, he was then obliged to go back to his master and serve his original time and any penal term that might be added by the justice as a penalty. All costs incurred in any suit under this act were charged against the servant if found guilty and were endorsed upon the contract by the justice.

THE PROTECTING CLAUSES.

The Masters and Servants Act provided a certain amount of protection to the servants or laborers under contract, and section 1423 of the Code provided that cancellation of the contract should follow conviction of the master or his overseers for any cruelty or misuse of a laborer or other violation of the terms of the contract, and that the master or his overseer might be fined or imprisoned also. The docking of time and fining laborers without their consent were not allowed by the courts.

Section 1424 provided for the cancellation of the contract in case of the death of the master. Contracts were not assignable and laborers could not be held for debt incurred while under contract and compelled to work out such a debt after the expiration of the contract.

Notwithstanding the protecting clauses in the law and a number of decisions of the higher courts in favor of the laborers, the system as it worked out was a form of peonage, and some employers used unfair means to keep their laborers in poverty and compel them to re-ship. Some of the plantation managers honestly believed that men would not work except under contract, and that their labor supply could not be kept up in any other way. The employment of free laborers was discouraged—they were too independent—and some of the plantations and ranches would not give them work. Many managers of sugar plantations, however, were opposed to the system. In its practical working it was in many ways unfair to both employer and employee. Free laborers were paid higher wages than the men under contract, and under the fixed rate of wages for all contract men, those who were strong, able and willing to work, received no more pay than those who were lazy or weak, and this tended, on the part of the laborers, to establish low standards of efficiency. The employer could not discharge the lazy, the vicious or the stupid if once under contract, and recourse to the courts was expensive and unsatisfactory.

The abuses under the system, while probably much exaggerated, were serious enough to attract attention, and led to a crusade of attempts to abolish the laws as they stood, or amend them sufficiently to make great reforms in the system. The charge was made in the press, and in common talk, that laborers on plantations lived in slavery and that managers and overseers were little better than slave-drivers.

ADVERTISER LED REFORM FIGHT.

Feeling ran high on both sides of the controversy. Planters were accused of ill-treatment of their men, and the judges of the lower courts of venality in their methods of administering the law. and, on the other hand, threats were made against the leaders in the work for reform, among whom were H. M. Whitney, editor

of the *Advertiser*, and J. O. Carter, who was then in the legislature.

The agitation had a good effect on the whole, and resulted in some changes, if not immediately in the law itself, in the treatment of the men under the law.

The system, however, endured all the attacks made at this time, and the close of the period saw it in full force.

DISASTROUS TO HAWAIIANS.

The contract labor system was in many ways disastrous to the Hawaiian laborers. On plantations where men had no homes of their own, the conditions were not favorable for family life. The makahiki houses, or quarters, were not suitable places for women and children. It could not be a natural life, and the presence of large numbers of men and comparatively few women caused many of the evils that follow such conditions.

Looking back to those days, much that then seemed to be a matter of course, now seems unnecessary. The housing of men and their families, the wages paid, and the treatment of men in other ways, need not be such that the only way to keep them is by the penal enforcement of a contract and fine or imprisonment for failure to carry out the terms of the contract.

SUGAR PRODUCTION.

The production of sugar during this period, and under the labor system then in vogue, increased from 722 tons in 1860 to 13,000 tons in 1876, an increase of 1800 per cent., but it was made possible only by the help of the large importations of foreign laborers to supply the demand.

The period from 1830 to 1860 was that of the flow of the tide, and high tide for the Hawaiian people in prosperity, development of character and control of their country, but the period from 1860 to 1876 was the beginning of the ebb.

FOURTH PERIOD.

The fourth period in the history of labor in Hawaii began with the great development of the sugar industry following the enactment of the Reciprocity Treaty with the United States in 1876 and continued until annexation to that country in 1898.

It was a period of great and rapid growth in wealth. The

production of sugar increased from 13,000 tons in 1876 to 222,000 tons in 1898.

The labor system continued to be the contract system of the last period and during the earlier years there was still a large number of Hawaiians on the sugar plantations. The Onomea plantation in 1885 had 148 Hawaiian laborers, and there were others with as large or even larger proportion of the entire force employed. Owing, however, to the large numbers of Chinese, Japanese, Germans, Norwegians, Portuguese, Galicians and South Sea Islanders that had been brought in by thousands to supply the ever-increasing demands, the Hawaiian laborer became less and less of a factor in the sugar industry.

WASTE, DRINK, CORRUPTION.

This period of twenty-two years from 1876 to 1898 saw the end of the old monarchical government; then, following it, the provisional government, the Republic of Hawaii, and finally annexation to the United States. It was a period of exploitation of the resources of the country, the government and the people, for business purposes, and resulted, incidentally, in loss of standing and influence in the community, that affected all classes of the people, to some extent. Simple habits of life and dress were abandoned and there followed imitation and emulation of the foreigners in extravagance and luxury. The influence of the king and court was not elevating. There was a general removal of wholesome restraints, and, among others, the law against giving or selling liquors to native Hawaiians was repealed on the ground that it was class legislation. The use of liquor became more general among men and women and the habit of using opium rapidly increased. Opium smuggling was then at its height, and the easy money it yielded was attractive to foreigners and natives alike. This resulted in bribery of officials and other forms of corruption, and lower standards, moral, social and political.

The poverty caused by bad habits was a powerful influence in the breaking up of homes, the separation of women from their husbands and the scattering of families.

FLOCKING INTO CITY.

During this period began the abandonment of the remoter villages of the group and the people flocked to the larger towns and

to places where more money could be earned for the gratification of expensive tastes. People left their old homes also, because of the encroachment of the sugar and rice plantations upon the lands in the watered valleys. This in itself need not have been injurious to the native people, but in too many cases the sale or leasing of their lands to foreigners resulted in their having large sums of money which they spent recklessly. After leaving their old homes, they did not, or could not, buy new ones.

The thoughtful Hawaiian must regard this period, from 1876 to 1898, as one of great injury to his people, and the destructive influences were such that the churches, the schools, the people themselves and their best friends could make but little headway against them.

FIFTH PERIOD.

The fifth period is that commencing in 1898 and is that in which we are now living. Annexation to the United States ended all labor contracts entered into under the old Masters and Servants Act. The sudden and complete change in the status of all laborers then under contract, did not make the upheaval that had been expected.

The labor contract system had been falling into disrepute and disuse, and many of the plantation owners and managers were glad to see the end of it. During the last years the system was in force, deserters were rarely arrested and taken into court, and the law providing for their punishment was rapidly becoming a dead letter. Laborers, while still under contract, had begun to work under a profit-sharing or piecework system that proved very satisfactory, to laborers and employers.

The production of sugar increased from 222,000 tons in 1898 to 595,000 tons in 1912, entirely by the use of free labor.

FEW HAWAIIAN LABORERS NOW.

Statistics kept by the Hawaiian Sugar Planters' Association show that the number of Hawaiians on the sugar plantations has grown less and less with each succeeding year until, as a race, they are negligible as a source of supply for general plantation work. They do not like to work in gangs at routine work, and they have never liked to work with men of other nationalities. The only instance in recent years of Hawaiians being willing to

do regular plantation work, in large numbers, during the strike at Waipahu and Aiea in 1909, does not prove anything.

The writer wishes to express his own full appreciation of the Hawaiian laborer, in the field, the mill and in other lines of work. There have been no better men employed on the plantations than the Hawaiians, strong, willing and efficient, and their faults, if any, have been easily forgotten when their good qualities have been considered. They have always worked well when properly treated, and have never been quarrelsome, revengeful or treacherous.

Some of the causes of their present condition have been outlined, but referenecs to the diseases and habits of civilization that have caused a decrease in the population of the group have been left out intentionally. They belong to another subject and more especially to the always debatable question as to whether or not contact with the white man must necessarily be injurious to the dark races.

In 1858 Prince Lot, afterwards King Kamehameha V, but at that time minister of the interior, said of his own people:

"The elevation of the Hawaiian people to the level of the people in civilized lands is a problem which the pious, the good and the true have endeavored to solve, and with what success let those answer whose spears drank the blood of their enemies on the pali of Nuuanu, whose relatives or friends bled on the altars of Kaili or Kalaipahoa; let those answer who owned nothing, not even the hope of a future, who were slaves in the deepest sense of the word.

"But though the change has been great and marvelous, though the steps in the ladder of civilization have been cleared by bounds rather than by the toilsome progress that has characterized the upward career of other nations, yet let us not flatter ourselves that the problem has been solved and the good achieved.

"Foreign countenance, foreign aid cannot do that for us which if it is done at all must be done by ourselves."

Much of the work of restoring the people to the position they held, must come, and is now coming, from the schools that are teaching the children and fitting the young men and women to

take their places in the world, beside and on even terms with those of other races.

The old cry of "Hawaii for the Hawaiians" should be abandoned; it was always a sign of weakness. The days of paternal care and of making allowances for weakness of character and lack of a sense of responsibility, because of race, have come to an end. It is for the good of the race and of each individual that it is only as a man and as a responsible member of society that a Hawaiian can now expect to hold his place in the community.

TESTING E. E. BATTELLE'S PROCESS OF SUGAR RECOVERY,

Brief Summary of the Official Report of the Investigation Thereon.

MENTION was made in the ANNUAL of 1912 of Battelle's new process of treatment of cane juice and saving of waste from molasses, on which letters patent were applied for which have since been secured. A matter of so much moment to the chief industry of this Territory—and to other sugar-producing countries—naturally called for a demonstration of its advantages over the system in vogue. This was in partial experimentation under the auspices of the Planters' Association during the season of 1912, but not sufficient to warrant a report thereon in our last issue. Arrangements were made for the continuation of this practical test of the process at the Ewa Plantation mill, as the most convenient and readily convertible with its efficient plant to accommodate this comparative service while taking off its 1913 crop. This investigation has been carried on under the direction of Dr. R. S. Norris, technical chemist of the Experiment Station of the Hawaiian Sugar Planters' Association, whose detailed report thereon has recently been issued, from which we present the following summary:

"The Battelle Process relates particularly to one for the manufacture of white sugars from juices, syrups, molasses and massécuites containing glucose, known as invert sugar; and has for its

objects the elimination of glucose, the increasing of the purities of all materials, the production of a white table or single grade of marketable raw sugar, and the extraction of a maximum amount of sugar with a minimum loss of the sugar contained in the initial material."

This process, it is claimed, can be carried out in existing factories with economical results, descriptive particulars of which are set forth for demonstration readily understood by experts thereon.

In the description of this new process, the distinctive features of juice treatment required was carefully observed in due proportions to the amount of juice charged up to the boiling point, following which the procedure continues to the end similar to that in vogue in beet sugar factories in the white sugar carbonation process.

Two series of investigations were conducted during the season, termed the Raw Sugar Trial, in which only a part of the complete Battelle Process was made use of, and the White Sugar Trial, on which full attention centered "to determine the merits of the process from the standpoint of white sugar, as regards quality, and indicated costs, in which the entire process, including the molasses treatment, was used." This latter feature was placed in charge of Mr. L. L. Edmunds, expert engaged for that service, who furnishes a detailed report thereon, supplementing that of Dr. Norris.

Sundry tables, illustrative and comparative, at various stages, give evidence of the exhaustive manner in which this practical test was conducted, with the results attained in each case, and by comparison with the defecation process in practice.

The expected increased yield by the Battelle Process in making white sugar, over the defecation process, of 98° purity sugar is 5.1% of sucrose, against which would be the extra cost for manufacture by the new method, in which lime cost appears to take a prominent part, and yet, at a variance of from \$3 to \$8 per ton for lime required, one ton of Battelle Process sugar shows a profit of from \$8.34 to \$9.97 over that of the defecation process on a basis of 3.35c per pound, or \$67 per ton.

Regarding the quality of the product, the report says: "Dur-

ing the White Sugar Trial at Ewa a number of lots of sugar were turned out equal in quality to the average beet granulated, and comparing very favorably with some samples of refined cane granulated collected in the Honolulu retail market. All of the sugar made during this trial was not of a marketable quality, showing that the better grade referred to was not made without difficulty." The belief is expressed "that any factory undertaking this process would have more difficulty in producing a marketable white sugar direct from juice than is experienced by beet sugar factories, though with improvements that would follow through experience, these difficulties would be overcome."

The investigation, it is admitted, was "handicapped in the making of a high-grade sugar in several ways, during the trial, by conditions that would not affect the results to such a degree on a commercial scale. It is a well-known fact among white sugar manufacturers that intermittent running is detrimental to the quality of the finished product. The full effect of this was experienced during this trial in not keeping the process going during the night, the thick juice pumped out of the evaporator each day being darker in color than that made later in the day, due to the presence of iron in the juice as was frequently demonstrated by chemical tests."

Dr. Norris concludes his portion of the report as follows:

"1. The Battelle Process can be worked on a manufacturing scale to produce either raw or white sugar, with or without the addition of the lime saccharate process for the recovery of sugar in the waste molasses.

"2. The recovery of sugar by this process, worked without the molasses treatment, is so much less by the defecation process as to make it unprofitable for manufacturing either raw or white sugar.

"3. The increased recovery of sugar, as calculated from the results obtained, through the application of the lime saccharate process on the waste molasses, is such as to indicate a substantial increase in profit in the manufacture of white sugar direct, over that at present obtained in the manufacture of raw sugar by the defecation process.

"4. Notwithstanding the increased recovery of sugar from the

waste molasses, the extra cost of manufacture by this process is such as to make it less profitable for the manufacture of raw sugar than is the defecation process.

"5. From observations made during the investigation the indications are that if the process were applied in the factories on these Islands the results would in many cases be better both in quality and quantity of sugar, than would be obtained with the experimental plant at Ewa."

VERIFYING A ROYAL BIRTHDAY.

WITH the action by the last legislature for a memorial to Kāuīkeaouli—Kamehameha III—in recognition of his division of lands among the people in his establishing a constitutional government, inquiry arises as to the correct date of his birth, which, though generally recognized and referred to as March 17, 1814, is also chronicled as August 11, 1813.

It is not recalled that any question has arisen heretofore upon the subject, nor any controversy thereon since the publication of this later mentioned date by Alexander in his "Brief History of the Hawaiian People," whereby the grounds of difference might be explained and the discrepancy understood. We must confess to some surprise at this variance when our attention was drawn thereto and questioned for the correct date. This has called for considerable research, whereby still another date is discovered.

The early histories are either silent or misleading on the subject. Dibble and Bingham do not mention it. Jarves in his first edition gives it as "early in 1816," though corrected in the latest edition to "March 17, 1814," the date that has been generally recognized.

The papers of the time of his death in 1854, the *Polynesian* and *Friend*, both give this same date, as does also the native historian, S. M. Kamakau, in his history of the Kamehamehas in the *Nupepa Kuokoa* of March 14, 1864.

Upon looking up the several Hawaiian chronological tables available, one published in Hitchcock's English-Hawaiian Dictionary, as prepared by Fornander, was found to be the basis for

the August event above mentioned, and apparently adopted by Alexander in his Brief History. The event is given as follows:

“1813—Kauikeaouli, afterwards Kamehameha III, was born on August 11th to Kamehameha I and Keopuolani. The day of his birth, however, was in after years conventionally fixed for March 17th, but the above date is the testimony of his nurse, Emilia Keaweamahī, wife of Kaikeoewa, Governor of Kauai. Kauikeaouli was born at Keauhou, N. Kona, Hawaii.”

This chronicle suggested that Kamakau, the recognized authority on the Kamehamehas, would throw light thereon, notwithstanding the date already quoted by him, but the question of date is entirely omitted in his account of the important event, which is given with somewhat interesting detail, as follows:*

“Various chiefs importuned Keopuolani that they be given the custody of the child at birth, but she refused, as she wished this service herself. Kuakini was one of these, to whom she said: ‘At the approach of birth pains will be your time to hasten hither, as there will be much contention, for many chiefs expect to get the child.’

“In the morning of birth many chiefs gathered, but the child seemed lifeless and Kuakini declined it, as he did not wish a dead child. When Kaikeoewa’s folk at Kuamoo, a mile distant from Keauhou, where the child was born, heard of the event, but that the child was dead, he came, prepared with his prophet Kapihe of the line of Napaa of Makuakaumana and his god Konohiokala. Upon their reaching the place Kapihe said to the assembled chiefs, ‘The child is not dead, it will live,’ and he prayed many prayers and fanned it vigorously till the child stirred and cried and recovered life.

“For this Kaikeoewa became the kahu hanai (guardian) of the child and took it to Kekaha, at Ooma, a solitary place, till it was five or six years of age. Keawemauhili was the dry nurse * * * Kopopolu the kahu alii (chief nurse), and Koipepeleleu and mother, Ulunui, and subsequently Kaaikane, were the wet nurses of the child.”

As this occurred at a time before calendars and their use were known to the Hawaiians, the omission of its date is natural, and doubtless was supplied later.

* Nupepa Kuokoa, March 28, 1868.

Reference was therefore had to the records of the Privy Council for its proceedings in connection with the death and obsequies of Kamehameha III. Here it was found that Mr. Wyllie, John Ii and Mr. Armstrong were appointed to prepare a biographic notice of the late king, at the meeting of December 16, 1854.

A few weeks later the result of this assigned duty was ordered published in the *Polynesian* and appeared January 6, 1855, wherein it states that he "was born on the 17th March, 1813, in Keauhou, district of Kona, Hawaii," without any reference whatever to any "conventional change." This date, March 17, 1813, is given also in the editorial notice and was the same on the coffin plate.

From the well-known intimacy of each member of this committee with the subject of their memoir and their reputed care in matters submitted to them, we see no reason to doubt the reliability or result of their finding. Had there been a "conventional change" in the date of his birth they were in a position to have become well aware of it and would have mentioned the fact, with the reasons therefor, as it was by no means a custom of the people, so far as we can learn.

KEANINI-ULA-O-KA-LANI.

Oahu version of a popular Hawaiian legend.

HAUMEA was the mother and Kuwailo the father of Keanini-ula-o-ka-lani, who was born at Kuaihelani, where all the demi-gods (kupuas) resided, among whom were Pele, Kamohoalii, and many others of kupua ancestry.

At the time of his birth Keanini-ula-o-ka-lani was adopted by Makalii, who cared for and brought him up to years of maturity, at which time his people wished him to select a wife. He was famed as being comely in form and feature; familiar with the games and pastimes of youth, and delighted with fishing experiences.

To assist in the choice of a desirable companion for one of his high station, Keaumiki and Keauka, his grandparents, with a goodly company, were sent forth on this special quest. After

due preparation for so important a voyage, they set sail in a coconut-tree canoe in search of a suitable maiden, and after certain days arrived at Niihau. Having made known their errand, Kapali Kolohale was brought forward as its prettiest woman, but when they compared her with Keanini, whose body was as the bud of the banana for smoothness and perfection of form, there was no comparison, so they left Niihau and sailed for Kauai. Here Kahalaomapuna was brought forth as the recognized beauty, and she was, apparently, a very handsome woman indeed, but she met with disfavor because portions of her body were covered with blotches.

Leaving Kauai they sailed for Oahu. Here Waialae was the acknowledged beauty, but when they compared her, she, too, had bodily imperfections. And so, in turn, they visited Molokai, where Haupu was its comeliest woman, and at Hana, Maui, where Popoalaea held sway for beauty. These were all indeed beautiful young women, but there was no resemblance in perfection to the body of Keanina-ula-o-ka-lani. They then turned and looked toward Hawaii, and as the mist hung over the cliffs of Waipio they left Maui and set sail across the channel. Arriving at dusk off the mouth of Waipio valley, they found the surf running high, but, nothing daunted, they watched their opportunity and rode their canoe in on the crest of a comber and landed triumphantly. Proceeding inland and about entering the house of the chief they were seized and put in prison for having landed during a season of kapu, and were made fast to the mano, a post set up in the prison called the "post of mano," and where the invaders were to be secured until daylight, when they would be brought forth and sacrificed upon the altar of the heiau, and their dead bodies thrown into its pit.

On account of their imprisonment they prayed earnestly as follows:

"The popolo which Kane planted above, grew above, had leaf above, had fruit above, matured above and ripened above. Gather together the fallen popolo of Kane; collect all together and prepare it. The season of nights are manifold. On missions of redress in the night season dost thou travel, Oh night! Prepare for the great night, for the great day is unpropitious and the

night is passing. Oh Keanini-ula-o-ka-lani, dwelling at Kuaihelani, the place of many gods and bosom friends, harken! Listen, Oh Kane-nui-akea; Oh Kunui-akea; Oh Lono-nui-akea and the assembly of gods, defend us."

After a brief pause they renewed their petition thus:

"Sleepest thou, Keanini-ula-o-ka-lani?

"Listen, Oh Kohikeekee! Oh Halawalawa! Oh Kaumauna! Oh Kaholewai!

"Like Kuaihelani art thou, Oh night! The great night shall be prepared, for this great day is unpropitious; the night is passing away. Amen. Amen, the kapu ends and flees away."

Keanini-ula-o-ka-lani, becoming aware of dire distress befalling his emissaries, sought to propitiate the gods in their behalf and his favor with a tempting feast, and thus he prayed:

"Here is the food, ye gods. O Kahuli Kahela! the woman who sleeps with her face upward, Moehanuna, Mikikaome, and others. Do awake! awake! awake! the rain, the sun, the calmness, the gentle creeping mist of the mountain, the mist that creeps downward; the male sea, the female sea, the infatuated sea, the brutal sea, the crazy sea; the rising tide, the weak tide. The lands are surrounded by the sea; the surf wave; the rough wave at Kahiki, Kalana. Kahiki, come and rise up and avert this death, O Lono. This is a prayer to you, Lono; Lono of the night; Lono of the day; Lono of the thunder; Lono of the lightning; Lono of the heavy rain; Lono of the dripping rain; Lono of the perpetual rain. O Lono, you are flying; flying to the Kona sea; the Koolau sea; to Oneula, Oneeli, Onelauakane, Umauma, the sharp white shell fish, the squid, the Naka, fish without eyes and bones, Kualakai, Pakiimoeone, Ulae with sharp teeth, Ula which live in the holes, the Puhi which live in the caves, the Aama which climbs the precipice, the Paiea which live in the opening of rocks. Kulelepoo, Heleleikeoho, Wahalaualii, Polihale, where the speaking conch of Pii and Kiha is kept. Oh Ku! Oh Lono! Here is the food which will bring life. Life is saved by me, Keanini-ula-o-ka-lani. Amen. Amen, the tabu ends."

While Keaumiki and Keauka were praying, the guards of the prison were listening and heard them mention the name of Keanini-ula-o-ka-lani. Immediately they went and informed the

chief, Olopana, that they had heard the men who were fastened in the prison house calling out while praying the name of Keanini-ula-o-ka-lani. When the chief realized this he ordered the guards to liberate them. So they were released and brought into his presence, and he inquired of them whence they had come. They replied: "From Kahiki, the land of Keanini-ula-o-ka-lani, which is Kuaihelani, where the demi-gods reside," whereupon they were released altogether.

The chief then asked them: "For what purpose have you come on this journey?" and they replied: "We came in search of a wife for our chief, who is Keanini-ula-o-ka-lani."

Then Olopana spoke to them, saying: "Yes, there is a woman here—my sister, Hainakolo." He told them to return and inform their chief of this fact and to come to Hawaii and receive his sister, who shall be his wife. Immediately afterward they returned home and appeared in the presence of Keanini-ula-o-ka-lani, and told him they had found him a wife and she had asked him to go to Hawaii. To this he assented, and preparations were made for the chief to comply with the request, and the canoes of Keanini were made ready for the voyage to Hawaii-nei.

On the day of sailing, Kumunuiaiake (red fish) appeared, at which the chief exclaimed: "You! What do you want?"

"I came because I desire as one to accompany the chief," was the reply.

"What can you do?" said Keanini, now looking like a Kumu-ula.

"To guard and protect you on the waters," was the reply.

The chief therefore consented and told Kumu to board the canoe. Then appeared also Moi. "And here are you, Moi!" said Keanini, his knees resembling its nose, "another guardian for the voyage." Thus he took them, one by one—first, Kumu; second, Moi; third, Aholehole, and fourth, Moanonuikalehua. The four came with Keanini-ula-o-ka-lani to Hawaii-nei, arriving at Waipio.

As was the custom upon the arrival of distinguished chiefs, Olopana prepared a great feast for his visitor from Kuaihelani, and celebrated the betrothal of Hainakolo and Keanini with surf riding and other sports and contests. Thus in a season of joyous feasting they were united and dwelt together for a period of

twenty days (two anahulus), when they returned to Kahiki, from whence the chief had come, where a child was born to them—a son—and he was named Leimakani. It was not long afterward that Keanini-ula-o-ka-lani deserted Hainakolo and went and lived with Hopaionemuu, the daughter of Makalii, his adopted parent, whereupon Hainakolo in desperation lived irreligiously; grieving for the love of her husband, she would not pray to the gods and disregarded the kapus.

She then set forth to return to Hawaii, embarking on a coconut-tree canoe with her son, and while in mid-ocean it capsized, but they swam the ocean with it till they landed at Niihau. While they were swimming the boy saw indications of land, and he called out to Hainakolo thus: "Say! Hai, Hai, a bird!" but Hai replied: "That is not a bird, my child; it is clouds, indicating land; we will then soon reach shore."

They continued to swim on until they landed at Nawiliwili, Kauai. There they left their own canoe, on which they had crossed the ocean, and sailed in a Hawaiian canoe, arriving eventually at Waipio, Hainakolo's birthplace, where they went ashore. Hainakolo caught sight of the ripe pandanus, and the fruit of the ulei, which she grasped and ate with avidity before praying to the gods, and, never looking back to her son Leimakani, she wandered on, distractedly, up the mountain, where she disappeared. The son remained where they had landed.

During the evening it was a custom with two old men of that place to fish for paoo for themselves. When they came to the sea beach they began their fishing duty at their accustomed place and continued along until they met the boy Leimakani, and this was the way they found him. They threw their net to catch the paoo, instead of which they caught the child, and immediately took him to their dwelling. The place where they lived was up at Opaololo, and the names of these old men were Kaholo-uka and Kaholo-kai. At this place they fed and brought up Leimakani until he reached young manhood. In all this time of his sojourn with these fishermen no one else ever saw the lad until Luukia, the chiefess of Hamakua, happened that way. When she saw him, a very handsome youth, she immediately fell in love with him and desired him for her husband and called his name Olapa-

iki-helewale. And so they lived together, and in the course of time Luukia gave birth to a son, which they named Lono-kai-olohia.

When Lonokaiolohia was being brought up, Luukia suddenly became very angry with her husband and she threw the child on the Pahoehe, the smooth shining lava, causing its death. When Leimakani saw that the child was dead he went and lifted up the body and began to gather the fragments which were scattered in the water. He brought some cloths called neupa, and lamented thus:

“Our child has passed away, the blood spattering to heaven; the blood burning on the earth; the blood strewn on the grass. I am only picking up the red blood; the life blood, picked up and wrapped in neupa and hung up in the shining heavens. O Lono-kaiolohia; O Lonokaiolohia.” Thus wailed Leimakani in his desolation at the double loss of his son and desertion of Luukia, and he called upon the gods for vengeance to attend her fleeing footsteps.

PEPEIAO.—*Hirneola polytricha*.*

An Obsolete Article of Export.

INQUIRY is made relative to an article of export, seldom heard of nowadays, that had annual appearance in the customs tables of Hawaii for over a quarter of a century, the fungus “pepeiao akua” (*Hirneola polytricha*), a Chinese edible gathered from the decaying or decayed limbs and trunks of the kukui tree (*Aleurites Moluccana*), which after proper sun-curing was packed in large bales for shipment, mostly to the Orient, though the export trade in the product here opened up originally with the San Francisco market. Its collecting and shipment were entirely in the hands of the Chinese merchants. As its native name implies, it resembled the ear both in shape and size, and to their primitive mind might have been the listening ear of the gods of the forest.

There is nothing to show the origin of its recognition by the Chinese here as a delicacy of their cuisine, nor the extent of its

* In the United States and England the fungi are called Jew's ears.

use by them in these Islands, but from the fragmentary reference to its appearance among the exports in 1852 it is fair to presume the testing of a foreign market was quite in the line of a commercial venture of a new product rather than relieving an overstocked home market.

The new article of export, "pepeiao akua," a species of fungi, first appears in the list for 1852, during which year it was discovered and gave promise of becoming an important article of commerce, and while not realizing the high prices it commanded at first, it was still in fair demand. The shipments of that and the early part of the following year went entirely to San Francisco. The credit of pioneership in this new industry belongs to Waialua, Oahu, whence the most of the first year's shipments were gathered, but its recognition as an article of trade soon extended its collection on the other islands, for Lahaina, Maui, made a direct shipment to the Coast in February of 1853, with what result is not shown.

This opening trade in a new product appears to have met a very fluctuating market, as high as forty cents a pound being secured at times, for possibly choice lots, but this could not be depended upon, six cents being the usual invoice price quoted.

Probably this great drop in the San Francisco market led to the business being transferred to China, where better or steadier prices prevailed, ranging from nine to twelve cents per pound. Unfortunately the published customs tables give no valuation with the quantities exported all through the years of its duration, which, for convenience of reference, is appended herewith:

Year.	Amount.	Year.	Amount.
1852	4,856 pounds	1869	85,215 pounds
1853	23,542 "	1870	41,968 "
1854	10,261 "	1871	37,475 "
1855	460 bales	1872	32,161 "
1856	370 "	1873	57,538 "
1857	375 "	1874	50,955 "
1858	3,887 "	1875	45,098 "
1859	523 "	1876	35,893 "
1860	178,794 pounds	1877	11,629 "
1861	278,330 "	1878	22,364 "
1862	301,417 "	1879	2,571 "
1863	279,158 "	1880	14,801 "
1864	368,835 "	1881	4,282 "
1865	223,979 "	1882	2,111 "
1866	120,342 "	1883	3,783 "
1867	167,666 "	1884	2,247 "
1868	76,781 "	1885	1,137 "

By the above table the export of fungus is shown to have declined rapidly in the seventies, and ceased entirely in 1888. This decline was noted in 1871 as "not a matter of regret, as the natives in their greed are said to have cut down whole forests of kukui for the sole purpose of obtaining the fungus," a product of the decaying trees. This may have been an exaggerated statement with little foundation in fact beyond confusion with the cause of the extinction of the early sandalwood trade.

RETROSPECT FOR 1913.

THE year drawing to a close may be said to have been a waiting year for Hawaii, one of unusual suspense, politically and commercially—due primarily to the change of administration at Washington, D. C. The non-action on our governorship by the retiring administration, after months of consideration, brought it as an appointment by the new party in power, which has drifted along unsettled, with several rival aspirants for the responsible position, yet up to the middle of November, with the nomination of L. E. Pinkham as the president's unconfirmed nominee before the Senate, all were still on the waiting list.

A like suspense hung over the community during the months pending the Tariff question, its free sugar clause threatening the main industry of these Islands. This has been carried through as a party measure without break, notwithstanding the sturdy efforts made to protect our interests.

The effect of the former has retarded many important projects contemplated by the last legislature throughout the territory, and no less serious is the check by the latter to the agricultural and commercial interests of our island community, all planned extensions and improvements beyond necessities being suspended.

We have been waiting for rains, too. The usual rainy season passed with the lightest record for many years, and with the exception of a few wet days in April and an unusual kona spell in June, the summer showers even are below the average. As last year's dryness has told on the sugar output this year, this further dry spell will naturally affect next year's production also.

Our bureau of immigration activities in Europe have been

much hampered waiting for more favorable charter conditions to bring the desired people hither when government measures and restrictions affecting their recruiting were satisfactorily complied with. Small wonder that this branch of the public service has been discontinued—for the present at least.

Hoping against hope has been the experience of our sugar men and pineapple growers for a return to better prices than have prevailed this year for their products. With a diminished yield from the cane fields and the lower market rate that has ruled throughout the season, we fall behind 1912 in the value of our sugar export no less than \$13,353,689. And while the canned pines show a large gain in quantity exported, it has been at a sacrifice in price for nearly the whole season's pack. Yet, even with this reduction, the European market is not giving the encouragement shippers hoped for.

Since the naval drydock disaster at Pearl Harbor last February, which ruined the work of years, the contractors and their large force of suspended workmen, in consequence, have anxiously awaited the report of official expert investigation thereon and decision of the government for its future for renewal of work on the same or changed site.

Yet in spite of these several causes which have seriously affected the progress and development that had been mapped out for Hawaii for the year 1913, material advance has been made in all lines of effort, as may be learned by the following review notes:

LEGISLATIVE.

The seventh territorial session convened according to law, electing the same presiding officers of the preceding term, thus greatly facilitating its formative work; their experience materially aiding in the handling and disposition of the larger amount than usual of business that came up for consideration and closing promptly on its specified time—the sixtieth day. The session was marked as dealing with many advanced measures, the consideration of which claimed the attention of well-appointed committees, as a rule, with the result that more harmony prevailed in the work of the two bodies; less time wasted in house discussion, and absence of friction with the executive. In several features it is

termed "the best yet," though we have not reached the ideal where self-interests give way to "pro bono publico" measures, hence the defeat again of the late A. S. Cleghorn's offer of Ainalau as the tropic park of Honolulu to the memory of Kaiulani. Several good measures fell short for want of sufficient time, some of which are assigned to hold-over committees for consideration and report at the next session. A new city charter and commission form of government was one of these. Fewer measures than usual received the governor's veto, the principal one being the second electrical franchise for this city, all of which vetoes were sustained.

The Rapid Transit franchise, after vigorous treatment and due consideration for the public welfare, received its coveted boon of extension. A primary law based on the Berkeley plan was enacted, and steps toward civil service and other improvements in county government measures adopted while assigning it several new responsibilities.

An indication of the progressive spirit of the 1913 session may be seen in the public utilities commission act; provision for the opening of new streets in Honolulu; strengthening the powers of the Board of Health; liberal allowance in educational matters of practical character, and some progress made in social welfare lines. Several very advanced measures were introduced and, though failing of passage, partly for lack of time to understand them and appreciate their scope, the consideration and discussions thereon will prove of educational value for future action. The majority in the house were not prepared for eugenic measures, and it sidestepped also on reapportionment according to latest census as required by the Organic Act.

MAY-DAY FESTIVITIES.

As intimated in our last issue, the regular observance of May Day, with its traditional festivities by the public school children of primary grades, has come to stay, for it was observed again this year with much elaboration and evident care in training and costuming for pageant effect. Everything passed off very creditably to all concerned, the different nationalities of the pupils and the spirit evinced by each in their participation of its features, whether in song, or dance, or pageant, being object lessons of

intense interest to the large body of spectators that thronged the square.

"May Day" by the kindergartners of the city was observed a few days earlier, in the same public grounds, so as not to conflict.

STAMP EXHIBIT.

Philately in Honolulu has taken a wide stride forward by the exhibition in the Games Hall of the Y. M. C. A. building on May 8, 1913, afternoon and evening, of the private collections of the stamps of Hawaii, as also other countries, under the auspices of the Hawaiian Philatelic Society, and for the first exhibit of the kind in these Islands it was a very creditable showing. Its educational value was apparent from the deep interest manifested by the throng of visitors other than members of the senior and junior philatelic societies in appreciation of the rareties brought out on the occasion.

The exhibit was not limited to members of the society, though few others appear to have availed themselves of this competitive display opportunity, nor did all members show the full strength of their collections. While some exhibitors showed well distributed points of origin, the majority were of special countries. In this, naturally, Hawaii's issues had several strong exhibitors and, to the surprise of many, more than one party presented their treasures in strips and in sheets. The Hawaiian collection of Charles Hustace Jr. was unique and valuable in that it embraced sheet and the plating feature, in which several of the plain bordered numerals were full and complete, making, with his set of the first, or flower-bordered issues of numerals—lacking the two-cent—the most valuable collection in the exhibit. A. F. Cooke also exhibited in sheets and strips, and was specially strong in "Provisional" issues. Bruce Cartwright Jr. enhanced his collection of Hawaiians by a historic biographic sketch of the subject portrayed on each.

John Gribble, president of the society, secured prizes for the best collections of United States, Canada, Great Britain and African issues.

Charles Hustace Jr. for most complete Hawaiian, as also Hawaiian errors and best collection of Kings' heads.

C. Maxwell excelled in New Zealand issues; W. T. Monsarrat

in best Canal Zones. L. Thurston Jr. covered general Europe commendably, while K. P. Avery did likewise with Asia.

The judges of the exhibition were O. Blackstad, A. Linnemann, G. P. Wilder and J. Batchelor.

FLORAL PARADE EVENTS.

Honolulu's eighth floral parade, now our recognized Washington's birthday observance, was participated in with added interest by a larger body than usual for the enactment of several new features, principal of which was the pageant of Kamehameha's invasion at Waikiki, with his canoe fleet of warriors. This was made the special feature, with attendant incidents illustrative of ancient Hawaiian customs, on the 21st, which took place at the stretch of beach between the Moana and Seaside hotels, and was witnessed by a vast throng of visitors and residents.

The events of the day proper, the 22nd., was full to the limit. An imposing military parade of some 3200 men in line, with review by Governor Frear, took place at 10 a. m. At noon was held an old-time Hawaiian luau, and at 1:30 p. m. the parade formed as usual in the executive grounds, and presented a very creditable floral procession as it set forth on its line of march via principal streets to the Alexander Field, Punahou, for a final review which did not materialize, owing to interference by the increased number of observers and vehicles pressing the grounds.

There were a few features of earlier parades absent this year, the pa-u riders being represented only by the Princess section, which was carried out in excellent taste and good-natured rivalry.

The decorated autos, floats and other vehicles showed a number of rich and chaste creations, some regret being expressed at the cumbersomeness of several constructions which interfered with its successful progress.

At Kapiolani park a tournament by the U. S. troops took place during the afternoon. In the evening a mining camp carnival of the Elks held sway in Bishop square, and an entertainment at the Opera House portraying Hawaii of old rounded out a memorable day.

REAL ESTATE.

While activity in real estate transactions may have modified this past year, it can not be said to have reduced in volume, finan-

cially, for there have been a number of important transfers, among which may be noted the purchase by the C. M. Cooke Estate of the Progress block for \$65,000, and subsequently the Model block adjoining for \$45,000. The Japanese Consulate, in disposing of the former, secured the Judd premises, Nuuanu avenue, for alteration by rebuilding for its uses.

The Morgan property at Emma square has been purchased by St. Andrew's cathedral for \$14,000, whereon will be erected the St. Peter's chapel, to cost \$20,000. The Bickerton property, at Waikiki, has changed hands at \$20,000, and the Cummins property, at Ahipuu, Nuuanu valley, was secured at auction sale by Mr. Geo. Sherman at \$56,000 for the erection of a fine residence on its commanding site. In like manner F. A. Schaefer bought the Pfotenhauer property, which adjoins his, at \$20,750, and in turn has disposed of portions for new residences. Mrs. Robert Shingle has increased her residence property, next Kapiolani park, by the purchase of adjoining tract.

The Lewers & Cooke block and premises, on King street, has been disposed of to A. S. Wilcox for \$250,000, and the Cooke Estate secured at auction the late W. F. Allen property, Bere-tania street, for \$12,000. An important sale of Kona, Hawaii, property of considerable area, including the Buchholtz ranch, has been that of W. R. Castle for \$30,000 to Mrs. B. M. Allen. Two other transactions exceeding \$150,000 in amount await signatures.

HOMESTEADS.

Homestead selections have shown activity the past year, five drawings having taken place with 325 allotments made, covering an area of 8375 acres, averaging 25.77 acres each, at valuations aggregating \$132,231.52. These were in six districts on Hawaii, and two each on Maui and Kauai; the selections being made under the several special features of homestead agreement, right of purchase leases, homestead leases and freehold agreements.

These homesteads were taken by the following different nationalities: Hawaiians, 150; Portuguese, 72; Americans, 45; Japanese, 16; Spaniards, 5; and all others, European, 13.

BUILDING NOTES.

Building activity has shown little diminution, though the uncertainty that has prevailed affected several contemplated struc-

tures. Upper Nuuanu is still adding to its attractive homes, as is Manoa; nor has Kaimuki ceased in its allurements. At Wai-kiki, the pretentious residence of Geo. Beckley; the enlargement changes of the former Campbell home of R. W. Shingle, and the typical Oriental house and grounds of W. F. Dillingham, at the front base of Diamond Head, sets a new pace in that direction.

The new insane asylum building, two-story concrete, of capacity for 120 patients, costing with its furnishings \$46,000; Pohukaina school, \$28,000; Catton, Neill & Co.'s two-story building for offices and salesroom, costing \$25,500, and the office and warehouse building of the California Feed Co. diagonally opposite, as also the girls' dormitory, Punahou, a three-story concrete structure, all of which were in progress at last writing, have been completed. This latter building was turned over to the college as a gift from the Castle Estate.

Schofield Barracks rejoices in a chapel costing \$8100, dedicated March 2, in which three denominations share—Episcopal, Catholic, and Presbyterian. A new Catholic church is being built on Wilder avenue, at Punahou, to cost completed \$30,000. The Honolulu Iron Works Co. is erecting a four-story reinforced concrete building (almost covering its Queen street block), as a machinery warehouse and show rooms, to be the second largest building in the city, at a cost of \$175,000. The Brewer estate has under construction a four-story fireproof office building, on King street, adjoining the First National Bank. The National Guard's Armory is another important structure under way, the contract for which was let at \$93,353. Bids are closed for school houses at Kauluwela (this city) at \$24,999, and Kalihi-kai \$7174.

Improvements of note are: the alteration and modernization of the offices of the Inter-Island S. N. Co., on Queen street, and the H. Waterhouse Trust Co., in the Campbell block; the enlargement changes of the W. W. Dimond & Co., Ltd., establishment, King street, doubling its capacity, and the alterations by the Cooke estate of the Progress block.

Important building improvements are transpiring at Lihue, Kauai; at Paia and Wailuku, Maui, and Hilo, Hawaii.

MAHUKA SITE CASE.

This case, under condemnation proceedings to acquire the adjoining Fort street properties (from King to Merchant) for the

enlargement of the Federal building site, which began toward the close of 1910, terminated the early part of this year, with awards covering fee, leasehold interests and damages, as follows:

Premises occupied by Castle & Cooke.....	\$138,000.00
“ “ “ Hawaiian Trust Co.	72,179.82
“ “ “ Office Supply Co.	49,872.00
“ “ “ E. O. Hall & Son.....	205,284.89

Total.....\$465,336.71

PUBLIC WORKS.

Among the various projects coming under this head may be noted the following:

A new lighthouse, the largest here, established at Kilauea, Kauai, was completed in May, 1913, and first operated for service on the 8th. It stands 180 feet above sea level, is of 250,000 candle-power, its huge revolving flashlight being seen twenty miles distant.

Vast changes have been made of the wharf premises and sheds formerly occupied by the Inter-Island steamers along Queen street, in their reconstruction for the Matson line. The Railroad coal wharf No. 2 is undergoing extensive repairs and improvements costing \$25,000. New wharf construction at Mahukona, Hawaii, is replacing the one completed last year at a cost of \$14,000 that was destroyed in the January storm. Kihei, Maui, is meeting difficulty and delay in its new wharf building.

Dredging for the deepening of Kahului harbor is completed, permitting large vessels to get closer to shore. Honolulu and Hilo work of like nature has progressed and new contracts for the further improvement of these three ports have been secured by the Hawaiian Dredging Co. aggregating \$328,000.

Work on the new floating drydock of the Inter-Island S. N. Co. to take the place of the marine railway has been prosecuted with vigor in dredging its site and constructing its steel caisson, etc., which was finished and launched November 11th. Its present length is 400 feet, with a lifting capacity of 4500 tons, but planned to be enlarged ultimately to 500 feet in length with a capacity of 7000 tons; length over blocks, 460 feet; extreme inside beam, 76 feet; extreme draft over keel blocks, 21 feet.

Hilo enjoys the distinction of possessing the largest and finest wharf in the Territory, built by the Lord-Young Co. It is 1400 feet long, 180 feet wide, and will be equipped with four railroad tracks and electrical machinery for loading and discharging vessels. The wharf is a solid fill from the dredgings of the adjacent coral reef, held by lava rock retaining walls. Warehouses its entire length is contemplated. The wharf has a depth of thirty feet alongside, and will accommodate three steamers at one time. In addition, the railroad wharf at that port is to be rebuilt and materially improved at an expense of \$30,000.

Paia, Maui, is in supply, through completion of the Kula branch pipe line, of an adequate supply of good fresh water for which applications largely exceeded expectations.

IRRIGATION PROJECTS.

Work on the Waiahole tunnel project to bring water through the Koolau range onto lands of the Oahu plantation was entered upon with vigor early in the year, but reduced its forces in mid-summer. Its August report showed 25 million gallons daily to have been developed, an amount interrupting the work. Tunneling is progressing from both sides of the range and had reached over 2500 feet. The total length of the main tunnel will be 14,442 feet. In addition there will be 40,000 feet of laterals with three miles of ditches and siphons.

Kauai is quietly progressing with an important irrigation project for the development of several thousand acres of land to be brought under cultivation in the Lihue and Koloa districts. In its course some eighteen tunnels are being constructed.

IMMIGRATION.

After many years of effort and large expenditure of means to procure a desirable class of European immigrants to serve the need of these Islands as agricultural home-builders, Hawaii concludes to bow to the fates against her and withdraw her active agents from the foreign fields. The difficulties encountered in recruiting, excessive cost of charters for the long voyage and expense attending the bringing hither of shiploads of laboring families at public expense, many of whom stop but long enough for earnings sufficient to enable them to pass on to the Coast, are responsible for this action.

The arrivals of Spanish and Portuguese immigrants this year, which brings it to a close—for the present, at least—were as follows: Per *Willesden*, March 30, 1377 souls, comprising 491 men, 377 women and 532 children. The *Ascot*, June 4, brought 1283 persons, of which 424 were men, 327 were women and 532 children. The average cost of these two lots of immigrants was \$360.00 and \$331.83 per male, respectively.

Russians show 67 arrivals, embracing 27 men, 18 women and 20 children.

All the above were through the Board of Immigration agency. Of Filipinos that have come, largely through the Planters' Association agency, there were 5746 for the fiscal year ending June 30.

CIVIC CONVENTION.

The second annual Civic Convention, comprising the various commercial bodies of all the islands, gathered in this city, September 22, as also the Boards of Supervisors of the several counties by invitation, over 150 in all. Following close upon a visit of the Ad Club to Hilo, in which the "see Hawaii first" seed was implanted, the spirit of coöperative promotion for the common good of all manifested itself clearly in all the subjects presented by experts on their respective themes, and the discussions thereon, in the two days' conferences held at the Young Hotel, which were open to the general public. Its sessions closed with a banquet at the Moana. Maui extends the invitation that the third annual convention gather in the great crater of Haleakala.

NAVAL DRYDOCK MISHAP.

During the work of pumping out the completed sections of the drydock of the Pearl Harbor naval station, February 17, that had long been in progress, the eight-foot layer of concrete with its piling as a flooring and the crib-work for its construction was forced up by the water pressure without, "due," it is said, "to upheaval of soft material under the coral and concrete," and wholly wrecking the work of four years in as many minutes.

Several official investigations of conditions followed, and reports have been submitted to the authorities at Washington, the latest being that of Alfred Noble, the expert civil engineer sent here by the naval construction bureau for thorough examination.

After exhaustive tests and return, his findings were made public October 24, recommending a materially changed plan of construction of the dock on the same site.

FERRETING HAWAII'S GRAFT.

Evidence of systematic graft in the administration of county government on Hawaii, through the investigation referred to in the last Annual, was such that special legislative authority was evoked and a commission appointed to ferret out and prosecute all evidences of fraud in Hawaii county administration. At this writing some eight months have been spent in the work, and the end is not yet in sight, so rooted has been the graft and tangled the accounts investigated, with the result, so far, of the conviction of Auditor Maguire, a confessed defaulter in a large sum, as also Treasurer Lalakea, Supervisor Purdy, Nahakuelua and others for fraudulent transactions. Supervisor Kealoha is now in the limelight, charged with bare-faced graft, for which impeachment proceedings have been instituted as also criminal prosecutions. And there are prospects of others' troubles yet to be revealed.

RAILROAD EXTENSIONS.

Work on the extension of the Kahului railroad to Haiku came to a successful conclusion early in the year, the first freight train crossing Maliko gulch February 8 and opening for passenger traffic on the 17th of same month. This will prove an important factor toward the agricultural development of that section of Maui.

The Hamakua branch of the Hilo railroad has also terminated its constructive work, reaching its terminal goal, Paauilo, the early part of summer and running its first through train in May. A special article on this subject, dealing with the difficulties encountered, the rich scenic country it passes through and possibilities it opens up, is given elsewhere in this issue.

Material reduction in time, as also in wear and tear, is looked for on the Oahu railroad by its newly-constructed direct road across Kalihi bay and the Damon peninsula toward the Puuloa station, and eliminates the curves of Moanalua's shore line. This work, which has been in progress the best part of the year, is just concluded.

ARMSTRONG MEMORIAL.

Oahu College honored the 74th anniversary of the late General Samuel Chapman Armstrong by a gathering of his appreciative friends of school and later years to special literary exercises in the dedicating and unveiling of a bronze memorial tablet to his memory, January 30th, on which occasion tributes to his eminent services as soldier, educator and benefactor were presented by intimate friends, classmates and admirers.

PASTOR PARKER'S JUBILEE.

The fiftieth anniversary of Rev. H. H. Parker's pastorate of Kawaiahao church was made an occasion of jubilation on the church premises, June 28th. Members, co-laborers from the other islands, officers and members of the Hawaiian Board, and the general public alike delighted to participate in extending congratulations and join in the jubilee services.

The following day marked the fiftieth anniversary also of the founding of the Hawaiian Board of Missions, which event was duly observed by special services at Kawaiahao, Rev. W. B. Oleson, corresponding secretary of the Board, giving the historic address.

NOTED VISITORS.

Among the many noted visitors of the year to Hawaii were a number whom Honoluluans delighted to honor, among which may be named Prof. Francis G. Peabody of Harvard University; Dr. Chas. W. Elliot, also of Harvard; ex-Attorney General Geo. W. Wickersham and party, en route to the Orient; Dr. Lyman B. Sperry, lecturer; John R. Mott, noted leader in the Forward movement; Hon. James T. Bryce, ambassador, statesman and author; Sir Edgar Vincent and party of British Empire Trade Commission, returning from the Colonies; Hon. Francis Burton Harrison, newly-appointed governor of the Philippines, en route to his post; Captain Lionel Halsey and officers of H. B. M. S. *New Zealand*, and Dean C. Worcester, retiring secretary of interior of the Philippines.

MUSICAL TREATS.

The satisfaction expressed by the Lambardi Opera Company at the patronage accorded them in their three weeks' season here, last March, echoed the appreciation by Honolulu audiences of the

series presented. The music public not only evinced their pleasure by successive nightly attendance of the opera house capacity, but lent their sympathy to the several artists with little if any spirit of hostile criticism. 'Tis true, it is the first season of grand opera presented in this city for many years, and never with so large and efficient a company—some fifty in all—which fact caused some misgiving as to its financial success. Manager W. D. Adams, in making satisfactory guarantee overtures to secure this uplift, and Signor Lambardi's expressions of satisfaction at his season's result as to promise a return in the near future, merits the appreciation of Honolulans. And as we have enjoyed them, so they have enjoyed us; their stay in this Paradise of the Pacific will be to them a pleasant memory.

Madame Clara Butt, eminent English soprano, and Kennedy Rumford, noted baritone, gave one concert at the Liberty theater in April, as they passed through to the Colonies. They were succeeded shortly afterward by David Bispham, the famous baritone, in two opera house concerts. In June the music lovers of Honolulu enjoyed two delightful concerts by Madame Nordica and attendant artists at the opera house during her week's sojourn en route to the Colonies. Madame Carusi, the famed harpist, gave a concert in October, aided by local talent, and more recently Marion Dowsett Worthington surprised and delighted a large audience of this her native city, in a concert at the opera house, by the development of her rich mezzo soprano voice since she essayed amateur roles here a few years ago.

FIRE RECORD.

The fire record for the past year shows a varied calendar. January 29th the Pahoia (Hawaii) lumber mill was entirely burned down, together with a large stock of ohia and koa lumber, causing a very heavy loss on which there was no insurance. Steps were at once taken to rebuild the mill to fulfil existing contracts and meet growing demands, resulting in a larger and better equipped establishment than ever, running in forty-three days.

February 8th the old R. A. S. Wood building, Beretania street, was seriously damaged by fire. Partial insurance only on its furniture.

On the night of the 15th, the steamer *Lurline* had a fire expe-

rience of some three hours' duration at her wharf, but prompt aid by the fire department, the Inter-Island S. N. Co. and the *Thetis* subdued it with little damage to the vessel.

Steamer *Mauna Kea* had an anxious time at Hilo, February 16th, from a quicklime fire, but was saved from serious damage to vessel, but though at much loss of cargo. The following month the *Mikahala* had a similar experience at Kaanapali, Maui.

March 23rd three stores were gutted by fire at the corner of Emma and Vineyard streets, this city, and on the 24th the plantation store, warehouse and railroad station at Olaa, Hawaii, were destroyed, loss estimated at over \$50,000, partly insured.

The Lyle residence at Kaimuki has been wholly destroyed.

Fire broke out in the after part of bark *S. C. Allen* on the marine railway, April 5th, whereby she sustained damage costing \$10,000 for repairs.

The dredger *Governor* of the Hawaiian Dredging Co. was seriously damaged by fire at its moorings on the night of September 1st, loss \$60,000, partially insured. On the 7th a midnight fire consumed the Diamond Head beach residence of Rev. J. Usborne, with its contents, loss placed at \$15,000, insured.

Fort Kamehameha had a narrow escape from a serious explosion on the 17th by an office fire, in overcoming which several men were badly burned. A tenement blaze in Chinese quarters at Kukui and River streets, October 27th, that threatened seriously for a time, was overcome by vigorous action of the fire department in which three of the men sustained severe injuries.

SHIPPING CASUALTIES.

In addition to the mishaps noted under the fire record are the following events:

S. S. Sonoma, two days out from Sydney on her January trip, through the breaking of her starboard propeller shaft, was obliged to return to port for repairs, but resumed and completed her voyage on one engine.

Ship *Edward Sewell* grounded on the reef, May 3rd, in entering Kahului harbor. By aid of the "wireless," several steamers and tugs hurried to her assistance, whereby, with favoring weather, she was floated off at high tide the following day without apparent injury.

The four-masted schooner *Robt. Searles*, Sandberg, master, lumber-laden from Astoria for Valparaiso, met with a terrific gale in lat. 17.49 N., long. 127 W., August 24th, in which the vessel was completely dismasted and the captain washed overboard by the heavy seas and drowned. Much of the deck load broke adrift, badly damaging the deck house and cabin and carrying away rudder, etc. Under jury rig and improvised steering gear, the first officer, Johannson, brought the vessel off Kahului, where she was towed to port October 4th, and subsequently to Honolulu for marine survey and repairs, estimated at \$15,000. After several weeks the hull and cargo was sold by the underwriters to the Inter-Island S. N. Co.

Bark *S. C. Allen*, Captain Mather, from Port Ludlow with lumber for this port, struck on the reef off Diamond Head about noon, October 13th, under light sails and in pleasant weather. Several steamers quickly responded to her distress signal, but the vessel was hard and fast and, resisting combined tug effort, she was abandoned to the underwriters the following day. Insurance on cargo and hull is placed at \$30,000. Several further attempts were made to haul her off, but, failing to respond, she was sold at auction on the 28th, as she lay, for \$4600, to Japanese contractors.

OUR MINOR INDUSTRIES.

Tobacco. Encouraging prospects are given on the Hawaiian tobacco situation in the East, by the trade recognition of its high grade, which would command full figures were the crop and shipments sufficient to warrant attention. With the experience gained in its culture and curing to meet the trade requirements, the course of the industry suggests a further investment of capital for the cultivation of larger fields and a little more time to reap the harvest for these years of patient endeavor, seeing it is slowly winning commercial recognition.

Since writing the above the Pioneer Tobacco Co. plans to incorporate to take over the Kona leases and property of Jared G. Smith, with its equipment for tobacco culture and cigar manufacture, on a capital of \$100,000.

Rubber. This product shows an increasing output with an improvement in quality that has secured it a place on the market,

favorable with Ceylon. Hawaii participated in the recent Allied Trades Exposition in New York, with both thick sheet rubber and the newly discovered Euphorbia rubber mentioned last year, expert report on which is awaited with interest. Last year's rubber export was 9093 pounds, valued at \$6610.87, as against 3023 pounds the previous year, valued at \$2949.72. The coming crop is estimated to exceed 15,000 pounds.

Sisal. The sisal culture of the Hawaiian Fiber Co. is being extended and with its newly enlarged machinery expects to turn out a crop of 600,000 pounds this year. Work is renewed recently in the Kona sisal fields, and with new improved rollers its mill work is expected to ensure better results. The sisal product of Pahala continues to come forward in encouraging supply, averaging 1000 bales a month. Market rates have ruled low, but the demand for our fiber has widened, enquiries coming from England, Germany and Japan.

Aviary Products. The shipments of beeswax and honey to the mainland shows favorable development and increase over the preceding year to the value of \$21,413. The exports of beeswax were less in quantity, but realized about the same as in 1912, while honey reached the sum of \$57,450.

Algaroba. This continues to prove the valuable local industry prophesied by its promoters, the gathering of the pods giving profitable employment to many; a new freight product for public carriers, and in its milled quality meeting ready sale for stock feed and thus reduces the need of imported products.

Canneries. The Hawaiian Canneries Co., incorporated for Kauai, establishing at Kapaa with a capital of \$100,000, and the Libby, McNeal and Libby Company plans to double their Ahui-manu factory capacity.

In addition to the foregoing agricultural industries is to be noted this year the establishment of the Kealoha Manufactory in the Kakaako district, this city, to give employment to girls—Hawaiians mainly—in the manufacture of clothing, entered upon as a philanthropic measure by Miss Kate Atherton, to ameliorate the conditions of a large class in the community. A large two-story building was erected, specially designed for its purposes, and the establishment outfitted with machines, furniture, materials, etc.

required, and provided the supervising matron and directors for the maintenance of the work. Some thirty girls find steady employment at a fair wage, and the product of their labor is assured a ready market.

AUTOMOBILES.

The auto habit is evidently growing throughout the Territory in a substantial manner, there being no less than 2235 licensed automobiles at the close of the fiscal year, June 30, 1913, of which Hawaii had 408, Maui 354, Kauai 209, and Honolulu 1265, this latter since reaching 1400.

SPORTING EVENTS.

The success attending the various contests abroad of Hawaii's sons this past year, wherever they have appeared, has certainly placed her on the sports map of the world as no amount of promotion literature would have done.

First was the high honors won by Hawaii's polo team in the international tournament held at Coronado, Cal., in March last, comprising W. F. Dillingham, Arthur Rice, Harold Castle and Frank Baldwin, resulting in their winning three out of five games played and securing the junior championship. The Coast teams looked upon Hawaii's quartet of players, with their string of ponies, as a huge joke expecting to compete with their crack poloists and blooded stock, but they won recognition by skilled and daring play, and brought home the trophies of their victory.

Our champion swimmer, Duke Kahanamoku, has continued to win laurels for himself and Hawaii in several Coast events, as also here, during the year, and the delegation of Hui Nalu swimmers in the July Fourth and recent contests of the Portola festivities proved popular events in which they captured many prizes.

New York banqueted the All-Chinese baseball team of Hawaii in recognition of their meritorious deportment during their tour again this year, and San Francisco did likewise to the Hui Nalus.

Hawaii is further identified with the national game by the good work of Honolulu's noted young pitcher, Johnny Williams, who is signed with the Sacramentos. His exceptional play on the Pacific coast has won him a place with the Detroit's for next season.

FITFUL KILAUEA.

Volcanic activity at Kilauea throughout the year has been little in evidence, sluggish phases with withdrawals of lava, succeeded at times by fitful revivals for brief periods, have prevailed till the middle of October, when, after heavy noises and rumblings following a series of tremors, returning action is evident. A party of scientists visited the summit crater of Mokuaweoweo early in October, but no changes were noted.

PARASITES.

Parasites of both the horn fly and fruit fly introduced by Prof. F. Silvestri, from West Africa, and bred under the care of D. T. Fullaway of the Hawaii Experiment Station for the board of agriculture and forestry, have so far multiplied as to permit the distribution, during summer, of ten thousand of the former and fifteen thousand of the latter, in several colonies to various parts of the different islands, where, it is hoped, they will become established for effective work under natural conditions. Further breeding of these enemies to insect pests of the Islands menacing our industries is still carried on.

PANAMA CANAL.

The historic event of blowing up of the Gamboa dyke, in the near completion of the Panama Canal, to join the waters of the Atlantic and Pacific oceans, which took place October 10th, 1913, was recognized in this city as the cable flashed the important fact, by flag display, screech of whistles, etc., and the sending of congratulatory messages to the President at Washington, and to Col. Goethals, the engineer in chief at Panama, on "the success of the world's greatest engineering work."

BANANA CLAIMS.

Claims to the number of 794, calling for damages in the sum of over \$250,000, arising out of the "mosquito campaign" of 1911, for which an appropriation of \$40,000 was provided, were adjusted before the Commission, comprising Wm. Rawlins, chairman; F. F. Fernandes and M. G. K. Hopkins, commissioners, resulting in thirteen claims withdrawn, amounting to \$2762.35; nineteen rejected, amounting to \$14,016.50. Accepted claims numbered 762, in settlement of which \$35,644.55 was awarded.

NECROLOGY.

Since our last issue the summons home has come to the following well-known residents, and Islanders abroad:

R. R. Elgin, Dr. Chas. A. Peterson (56), Chas. J. Bon (42), Miss M. Chapman (74), Dr. W. D. Alexander (79), Hon. C. M. Hewitt; Mrs. A. M. Hastings, in Portland, Me.; John A. Cummins (79); Wm. F. Roy, Kona (35); J. F. Turner, Puna; Alvah K. Clark, in Oakland, Cal. (81); Wm. Langton, in California (52); Mrs. W. D. Alexander (79), W. Pfotenhauer (51), Ralph A. Lyon (32), W. F. Sharratt, Fred. Wittrock (65), W. G. Sproul (53); Mrs. J. (Lyons) Hay, in Oregon (70); Miss Rose Davison (43), Miss M. A. Chamberlain (80), Geo. H. Paris; Judge Chas. Copp, Maui (66); Ralph Wilcox, Kauai (32); R. D. Ellsworth (82); Rev. A. B. Weymouth, Lahaina (74); Mrs. H. Culman (49), Jas. Hay Wodehouse (52); Chas. Furneaux, Hilo (78); H. A. Parmelee (66); Rev. J. A. Cruzan, Santa Rosa (73); Mrs. C. C. von Hasslocher (79), A. A. Montano (66).

STOCK AND BOND SALES.—The annual report of transactions of the Honolulu Stock and Bond Exchange for the twelve months ending with July, 1913, showed a total of 109,192 shares of sugar stocks having changed hands, amounting to \$2,380,225.54, the activities of eighteen corporations, with 26,944 shares commercial stocks of \$1,075,591.32 value, confined to eleven concerns, and \$1,096,500 par value of sundry and government bonds, of eighteen issues, for \$1,071,545, giving the total volume of business for the year \$4,527,361.56.6

SUGAR CROP OF 1913.—At the annual gathering of the Hawaiian Sugar Planters' Association, its thirty-third session, the official report of the crop for 1912-13 showed a total of 546,798 tons, the third largest in its history, that of 1912 being the banner year, with the preceding one its not distant second, as shown by comparative table of several years past on page 224.

List of Sugar Plantations, Mills and Cane Growers Throughout the Islands.

Those marked with an asterisk (*) are planters only; those marked with a dagger (†) are mills only; all others are plantations complete, owning their own mills. (Corrected to November 15, 1913.)

NAME.	LOCATION.	MANAGER.	AGENTS.
Apokaa Sugar Co.*..	Ewa, Oahu	G. F. Renton ..	Castle & Cooke
Ewa Plantation	Ewa, Oahu	G. F. Renton ..	Castle & Cooke
Gay & Robinson ...	Makaweli, Kauai.	S. Robinson.....	H. Wtrhse. Tr. Co
Grove Farm*	Nawiliwili, Kauai.	Ed. Broadbent ..	Hackfeld & Co.
Hakalau Plant. Co... Hilo, Hawaii		J. M. Ross	Brewer & Co.
Halawa Sugar Co... Kohala, Hawaii ..		Atkins Wight ..	Davies & Co.*
Hamakua Mill Co... Hamakua, Hawaii.		A. Lidgate	Davies & Co.
Hawi M. & P. Co... Kohala, Hawaii ..		John Hind	Hind, Rolph & Co.
Haw. Agr. Co..... Kau, Hawaii		W. G. Ogg	Brewer & Co.
Haw. Com. & S. Co. Puunene, Maui ..		F. F. Baldwin ..	Alex. & Baldwin
Hawaiian Sugar Co.. Makaweli, Kauai ..		B. D. Baldwin ..	Alex. & Baldwin
Hawaii Mill Co..... Hilo, Hawaii		W. H. Campbell.	Hackfeld & Co.
Hilo Sugar Co. Hilo, Hawaii		John A. Scott ..	Brewer & Co.
Honolulu Plant. Co.. Halawa, Oahu ..		Jas. Gibb	Brewer & Co.
Honokaa Sugar Co.. Hamakua, Hawaii.		Alex. Morrison..	Schaefer & Co.
Honomu Sugar Co.. Hilo, Hawaii		Wm. Pullar	Brewer & Co.
Hutchinson S. P. Co. Kau, Hawaii		C. Wolters	Brewer & Co.
Kaeleku Sugar Co.. Hana, Maui		J. Chalmers	Davies & Co.
Kahuku Plantation .. Kahuku, Oahu ..		Andrew Adams ..	Alex. & Baldwin
Kaiwika Sugar Co.. Ookala, Hawaii ..		Jos. Johnston...	Davies & Co.
Kekaha Sugar Co... Kekaha, Kauai ..		H. P. Faye	Hackfeld & Co.
Kilauea S. Plant. Co. Kilauea, Kauai ..		J. R. Myers	Brewer & Co.
Kipahulu Sugar Co.. Kipahulu, Maui ..		Ah Ping	Hackfeld & Co.
Kohala Plantation .. Kohala, Hawaii ..		Geo. C. Watt ..	Castle & Cooke
Koloa Sugar Co. Koloa, Kauai		C. H. Wilcox ..	Hackfeld & Co.
Kona Developmt Co.. Kona, Hawaii		E. E. Conant ...	Hackfeld & Co.
Koolau Agr. Co. Koolau, Oahu ...		W. M. McQuaid.	Hawn. Dev. Co.
Kukaiau Mill Co.† .. Hamakua, Hawaii.		J. McLennan ...	Davies & Co.
Kukaiau Plant. Co... Hamakua, Hawaii.			Davies & Co.
Laie Plantation Laie, Oahu		S. E. Wooley ..	Alex. & Baldwin
Laupahoehoe S. Co.. Laupahoehoe, Ha.		C. McLennan ...	Davies & Co.
Lihue Plant. Co. Lihue, Kauai ...		F. Weber	Hackfeld & Co.
Makee Sugar Co. Kealia, Kauai ...		G. P. Wilcox.....	.....
Maui Agr. Co. Haiku, etc., Maui.		H. A. Baldwin ..	Alex. & Baldwin
McBryde Sugar Co.. Wahiawa, Kauai..		F. A. Alexander.	Alex. & Baldwin
Niulii Mill & Plant.. Kohala, Hawaii ..		Robert Hall	Davies & Co.
Oahu Sugar Co..... Waipahu, Oahu ..		E. K. Bull	Hackfeld & Co.
Olaa Sugar Co. Olaa, Hawaii		C. F. Eckart....	Bishop & Co.
Olowalu Sugar Co.. Olowalu, Maui ..		Geo. Gibb	Brewer & Co.
Onomea Sugar Co... Hilo, Hawaii		John T. Moir ..	Brewer & Co.
Paauhau S. Plant. Co. Hamakua, Hawaii.		Alex. Smith	Brewer & Co.
Pacific Mill (†) Hamakua, Hawaii.		Alex. Morrison..	Schaefer & Co.
Pepeekeo Sugar Co.. Hilo, Hawaii		Jas. Webster ...	Brewer & Co.

**List of Sugar Plantations, Mills and Cane Growers
Throughout the Islands—Continued.**

NAME.	LOCATION.	MANAGER.	AGENTS.
Pioneer Mill Co., Ltd.	Lahaina, Maui ...	L. Weinzheimer..	Hackfeld & Co.
Puakea Plant Co. ..	Kohala, Hawaii ..	H. R. Bryant ..	H. W. Trhse. Tr. Co
Puako Plant. Co. ..	S. Kohala, Haw..	J. C. Searle	Hind, Rolph & Co.
Union Mill Co.	Kohala, Hawaii ..	H. H. Renton ..	Davies & Co.
Waiakea Mill Co. ..	Hilo, Hawaii	D. Forbes	Davies & Co.
Waialua Agr. Co. ..	Waialue, Oahu ..	W. W. Goodale.	Castle & Cooke
Waianae Plantation..	Waianae, Oahu ..	Fred Meyer	J. M. Dowsett
Wailuku Sugar Co. ..	Wailuku, Maui ..	H. B. Penhallow.	Brewer & Co.
Waimanalo S. Co...	Waimanalo, Oahu.	Geo. Chalmers ..	Brewer & Co.
Waimea Sug. M. Co.	Waimea, Kauai ..	John Fassoth ...	Hackfeld & Co.

Registered Voters, by Races, at General Elections, 1904-12.

Race.	1904.	1906.	1908.	1910.	1912.
Hawaiian	9,260	9,635	8,967	9,619	9,435
American	1,872	1,674	1,715	1,763	2,305
Portuguese	728	939	1,230	1,530	1,769
British	542	563	567	554	544
German	301	301	322	333	299
Other whites	373	246	195	234	239
Chinese	175	220	272	396	486
Japanese	2	....	6	13	48
Total	13,253	13,578	13,274	14,442	15,185

Registered Voters by Races and Districts, at last General Election, 1912.

Nationality	Hawaii		Maui	Honolulu		Kauai	Total
	1	2	3	4	5	6	
Hawaiian.....	928	1,102	1,715	1,170	1,953	543	7,411
Part Hawn....	176	186	332	497	681	152	2,024
American.....	226	85	163	1,292	492	107	2,365
British.....	86	24	51	266	101	16	544
German.....	28	14	26	96	65	70	299
Portuguese....	421	88	283	484	318	175	1,769
Chinese.....	19	22	26	116	295	8	486
Japanese.....	21	7	4	3	7	6	48
Others.....	43	5	20	96	49	26	239
Total.....	1,948	1,533	2,620	4,020	3,961	1,103	15,185

HAWAIIAN SUGAR CROPS, IN TONS, 1908-13.

From Table Prepared for Hawaiian Planters' Association by
W. O. Smith, Secretary.

Prior years of this table, originating in 1891, will be found in Annuals
since 1901.

ISLANDS	1908	1909	1910	1911	1912	1913
Production of Hawaii	180,159	172,341	159,856	193,456	209,920	197,415
" " Maui.	122,629	134,605	139,454	139,564	248,585	124,819
" " Oahu.	137,013	138,423	128,648	133,133	139,712	124,228
" " Kauai.	81,322	89,787	90,169	100,668	97,041	100,336
Grand Total.	521,123	535,156	518,127	566,821	595,258	546,798
HAWAII PLANTATIONS.						
Waiakea Mill Co.	9,761	9,486	10,424	13,365	14,332	13,073
Hawaii Mill Co.	2,818	2,838	2,313	2,917	2,378	2,857
Hilo Sugar Co.	12,853	12,291	12,568	12,301	13,872	14,031
Onomea Sugar Co.	17,006	14,416	12,843	16,230	17,454	16,884
Pepeekeo Sugar Co.	7,590	6,873	7,012	7,925	8,009	8,952
Honomu Sugar Co.	7,511	6,041	6,541	7,293	7,450	7,001
Hakalau Plantation Co.	12,834	11,586	11,905	14,157	17,116	15,400
Laupahoehoe Sugar Co.	7,944	8,004	7,970	8,058	9,087	9,676
Kaiwiki Sugar Co.	5,195	6,646	*2,134	5,010	5,896	5,145
Kukaiau Plantation Co.	2,141	2,225	1,037	2,662	2,021	2,078
Kukaiau Mill Co.	1,427	1,483	1,728	1,774	1,347	1,385
Hamakua Mill Co.	12,355	8,293	5,526	7,262	9,461	6,845
Paauhau Sugar Pl't'n Co.	10,448	9,315	7,493	8,411	11,391	9,958
Honokaa Sugar Co.	7,657	10,533	7,562	9,134	8,259	10,103
Pacific Sugar Mill.	3,459	5,263	5,055	7,499	7,001	5,938
Niulii Mill and Plantation.	2,452	2,768	2,231	2,648	2,014	2,803
Halawa Plantation.	1,958	1,135	1,679	1,667	1,902	1,641
Kohala Sugar Co.	4,914	5,570	4,662	5,924	5,979	5,675
Union Mill Co.	3,259	3,160	1,811	3,022	3,990	1,769
Hawi Mill and Plantation.	7,125	6,011	6,881	7,715	9,453	6,489
Kona Development Co.	1,000	1,271	1,589	2,333	2,570	2,943
Hutchinson Sugar Plntn. Co.	9,628	4,712	6,580	6,659	8,002	5,510
Hawaiian Agricul. Co.	10,274	11,406	11,003	13,775	14,938	12,856
Puakea Plantation.	661	992	1,474	1,094	1,538	839
Olaa Sugar Co.	15,795	19,179	19,483	24,026	22,941	27,399
Puna Sugar Co.	1,691					
Puako Plantation.	403	835	352	595	519	185
	180,159	172,341	159,856	193,456	209,920	197,415

* Formerly Ookala Sugar Plantation Co.

HAWAIIAN SUGAR CROPS, 1908-13—Continued.

MAUI PLANTATIONS.	1908	1909	1910	1911	1912	1913
Kipahulu Sugar Co.....	1,843	1,960	2,046	2,193	2,197	1,408
Kaeleku Plantation Co.....	3,026	4,004	5,221	4,492	4,949	4,938
Maui Agriculture Co.....	22,627	28,808	29,295	30,765	34,612	24,633
Haw'n Coml & Sug. Co..	56,150	52,725	56,865	55,050	60,010	50,310
Wailuku Sugar Co.,	10,072	17,761	16,932	16,197	16,775	13,988
Olowalu Co.....	1,765	1,829	1,796	1,693	1,707	1,738
Pioneer Mill Co., Ltd....	27,146	27,518	27,299	29,174	28,335	27,804
	122,629	134,605	139,454	139,564	148,585	124,819
OAHU PLANTATIONS.						
Waimanalo Sugar Co.....	4,242	4,404	3,845	4,962	4,979	4,287
Laie Plantation.....	971	829	1,170	784	1,200	977
Kahuku Plantation Co....	6,519	6,487	5,566	5,686	6,024	6,215
Waialua Agricultural Co.	30,376	32,267	30,870	32,271	33,356	29,751
Waianae Co.....	5,686	6,469	6,614	7,124	6,021	5,226
Ewa Plantation Co.....	33,919	33,949	31,422	31,206	34,435	29,512
Apokaa Sugar Co.....	984	432	902	453	895	381
Oahu Sugar Co.....	35,320	34,651	29,296	33,243	33,472	28,142
Honolulu Plantation Co.	18,996	18,688	18,373	17,143	18,692	19,337
Koolau Agricultural Co..	.....	247	590	261	638	400
	137,013	138,423	128,648	133,133	139,712	124,228
KAUAI PLANTATIONS.						
Kilauea Sugar Plntn Co.	3,194	4,975	4,102	5,471	5,543	5,451
Makee Sugar Co.....	7,408	4,664	5,823	4,168	5,219	7,418
Lihue Plantation Co.....	14,445	15,780	14,765	17,740	18,021	19,819
Grove Farm Plantation...	2,508	3,376	3,673	3,724	3,098	3,695
Koloa Sugar Co.....	7,361	7,303	7,709	8,960	8,005	5,886
McBryde Sugar Co.....	11,294	13,686	10,596	14,073	13,147	14,509
Hawaiian Sugar Co.....	21,633	23,788	23,422	24,975	22,221	22,308
Gay & Robinson.....	2,675	3,354	3,223	4,684	4,659	4,821
Waimea Sugar Mill Co....	1,790	1,707	1,906	1,860	1,922	1,610
Kekaha Sugar Co.....	8,283	10,385	14,124	14,185	14,348	14,008
Estate of V. Knudsen....	731	769	826	828	858	811
Total.....	81,322	89,787	90,169	100,668	97,041	100,336

POSTAL SERVICE, TERRITORY OF HAWAII.

Corrected to November 15, 1913.

Frank J. Hare, Inspector in Charge.

Geo. W. Carr, Asst. Supt. Railway Mail Service.

Jos. G. Pratt, Postmaster.

Jos. Kubey, Asst. Postmaster; T. P. Mellin, Supt. of Mails; N. K. Hoopii, Chief Registry Clerk; W. C. Peterson, Chief Money Order Clerk; J. Nohoikau, Chief Mailing Clerk.

POSTMASTERS ON HAWAII.

Hilo.....	H. D. Corbett	Kurtistown	A. G. Curtis
Papaikou	E. J. Weight	Keauhou.....	Mrs. H. L. Kawewehi
Pepeekeo.....	A. P. Martin	Holualoa.....	L. S. Aungst
Honomu	Wm. Hay	Kailua.....	John P. Curtis
Kawaihae....	S. K. Kamaipelekane	Kealakekua.....	Robt. V. Woods
Mahukona	E. Madden	Napoopoo	J. A. Luis
Kukuihaele	Aug. Ahrens	Hoopulua.....	W. H. G. Arneemann
Kukaiau	Carl Siebert	Hookena.....	L. P. Lincoln
Paaupau	Alex. Smith	Pahala	W. G. Ogg
Kohala	J. M. Souza	Ninole	D. Vierra
Kamuela	C. Sharratt	Waiohinu.....	Anna H. McCarthy
Paauiilo	Anthony Lidgate	Naalehu	Carl Wolters
Laupahoehoe.....	E. W. Barnard	Hakalau	Wm. Ross
Ookala	Jas. Johnson	Olaa	John Watt
Honokaa.....	A. B. Lindsay	Papaaloa	J. Hay Wilson
Kapoho	H. J. Lyman	Mountain View	H. G. Junkin
Pahoa	Saml. Johnson	Volcano House	D. Lycurgus

POSTMASTERS ON MAUI.

Lahaina	Arthur Waal	Kipahula	W. W. Taylor
Wailuku.....	A. F. Costa	Kahului.....	A. H. Silva, Jr.
Makawao	J. E. Tavares	Paia	D. C. Lindsay
Hana	N. Omsted	Hamakuapoko	J. J. Patterson
Puunene	F. F. Baldwin	Haiku	Jas. Lindsay
Kaupo	Jos. Keawe	Keanae.....	J. W. K. Halemano
Makena.....	D. Kapohakimohewa	Nahiku.....	Jas. A. Achong
Kihei.....	Alex. McLeod	Waiakoa	Joaquin Vincent
Honokohau	David Fleming	Huelo	W. F. Pogue

POSTMASTERS ON OAHU.

Aiea	G. L. Duckworth	Waialea	H. M. Tucker
Pearl City.....	J. P. Keppler	Kahuku	Andrew Adams
Watertown.....	H. P. Benson	Laie.....	S. W. Woolley
Waipahu.....	J. H. Travis	Punaluu	Wm. McQuaid
Wahiawa		Waikane.....	Sam'l Kaiwi
Ewa	Jas. D. Davidson	Heeia.....	John Ii Pahia
Waianae	F. Meyer	Waimanalo	A. Irvine
Waialua.....	H. H. Plemmer	Schofield Barracks....	M. J. Borges
Haleiwa	Clifford Kimball	Fort Shafter.....	Wm. Siegel
Maunawai	F. E. Haley	Pearl Harbor.....	F. G. W. Cooper

POSTMASTERS ON KAUAI.

Lihue.....	Frank Crawford	Kealia.....	Jno. W. Neal
Koloa.....	C. H. Wilcox	Kilauea.....	J. R. Myers
Hanapepe.....	H. H. Brodie	Kekaha.....	A. F. Knudsen
Makaweli.....	B. D. Baldwin	Waimea.....	C. B. Hofgaard
Eleele.....	Mrs. Maria Silva	Hanalei.....	Mrs. S. B. Deverill
Homestead.....	M. R. Jardin		

POSTMASTERS ON MOLOKAI AND LANAI.

Pukoo.....	D. K. Ilae	Keomoku.....	Geo. Munroe
Pelekunu.....	J. Kapahu Wilson	Kalaupapa.....	J. S. Wilmington
Halawa.....	David Kalaau	Kaunakakai.....	

POST OFFICE INFORMATION.

Office hours of the General Delivery are from 6 a. m. to 12 o'clock midnight. On legal holidays the time is from 8 a. m. to 9 a. m.

Hours of the Stamp and Registry Department are from 8 a. m. to 6 p. m., and of the Money Order Department from 9 a. m. to 5 p. m.

The General Delivery is open (except Sundays and holidays) from 6 a. m. till midnight, for the delivery of mail, registering of letters and issuance of Money Orders.

Inter-island mails close forty-five minutes before the sailing of steamers, excepting steamers sailing at noon Tuesdays and Fridays, which close at 11 a. m. For Orient ports the ordinary mails close one hour prior to steamer's departure; for the States, one hour thirty minutes.

Registry office closes two and a half hours before steamer departure.

RATES OF POSTAGE, DOMESTIC.

First class matter (letters, etc.).....2 cents per oz. or fraction
 Second class (newspapers and periodicals).....1 cent per 4 oz. or fraction
 Third class (books, circulars).....1 cent per 2 oz. or fraction
 Fourth class (Parcel post, merchandise—limit of weight, 11 lbs.)—To

U. S., 1 cent per oz. up to 4 oz.; over 4 oz. to 11 lbs., 12 cents per lb.
 To Islands: Local by carrier, 5 cents per lb., 1 cent each additional 2 lbs.

Oahu, Maui, { First Zone
 Lanai, Hawaii, { Second Zone } 5 cents 1 lb., 1 cent each additional lb.
 Kauai:

Limit of weight to Islands 1st and 2nd Zones, 20 lbs.

Registration Fee (additional postage).....10 cents

Immediate Delivery Stamp (additional to postage).....10 cents

Postal Cards.....1 cent each

FOREIGN POSTAGE.

The rate to all foreign countries except Great Britain, Canada and Mexico are: Letters per ounce or fractional part, 5 cents for first ounce, and 3 cents for each additional ounce. Printed matter, 1 cent for each 2 ounces or part. Postal Cards, 2 cents each.

Parcels of Merchandise, 12 cents per pound. Limit of weight, 12 pounds.

TERRITORIAL REGISTER AND DIRECTORY FOR 1914.

Corrected to November 29, 1913.

TERRITORIAL OFFICIALS.

Lucien E. Pinkham.....Governor
E. A. Mott-Smith.....Secretary
W. W. Thayer.....Attorney General
D. L. Conkling.....Treasurer
J. W. Caldwell.....Supt. Public Works
Joshua D. Tucker.....Commissioner Public Lands
T. H. Gibson.....Supt. Public Instruction
J. H. Fisher.....Auditor
Wm. Henry.....High Sheriff
G. R. Clark.....Secretary to Governor

Jonah K. Kalaniana'ole.....
.....Delegate to Congress

LEGISLATIVE BODY.

SENATORS.

Hawaii—D. K. Baker, R. H. Makekau, J. F. Woods, D. E. Metzger.
Maui—Philip Pali, H. A. Baldwin, H. B. Penhallow.
Oahu—Cecil Brown, A. F. Judd, C. F. Chillingworth, J. L. Coke, C. P. Iaukea, A. J. Wirtz.
Kauai—E. A. Knudsen, C. A. Rice.

REPRESENTATIVES.

Oahu—J. W. Asch, C. H. Cooke, J. Kalakiela, H. M. Kaniho, W. R. Kinslea, D. M. Kupaiea, E. J. McCandless, S. S. Paxson, A. Robertson, J. K. Paele, N. Watkins.
Maui—J. P. Goodness, G. P. Cooke, C. K. Makekau, E. Waiaholo, Jno. Wilcox, A. F. Tavares.
Hawaii—E. Da Silva, H. L. Holstein, G. H. Huddy, A. Irwin, E. K. Kaana, D. K. Kaupiko, H. L. Kawewehi, N. K. Lyman.
Kauai—J. H. Coney, J. K. Lota, W. J. Sheldon, R. P. Spalding.

NATIONAL GUARD OF HAWAII.

Walter F. Frear.....
.....Governor and Commander in Chief

GENERAL STAFF OFFICERS.

John W. Jones....Col. and Adjutant General
Charles W. Ziegler....Col. and Insp. Genl.
Charles B. Cooper....Lt. Col. and Surg. Genl.
John W. Short.....Lt. Col. Q. M. Corps
Joseph H. Fisher.....Lt. Col. P. M. Corps
William L. Moore....Major Surg. Med. Dept.
Emil C. Peters.....Captain J. A. Genl.
Elmer T. Winant....Captain Insp. S. A. P.

George E. Smithies.....Captain Ord. Officer
F. L. Morong.....Captain Surg. M. Dept.
Leo L. Sexton.....1st Lieut. Med. Corps
Rudolph W. Benz.....Captain Med. Corps

Lt. Arthur L. Bump...Insp. Instr. N. G. H.

FIELD OFFICERS.

Arthur Coyne.....Col. 1st Infy.
William R. Riley.....Lieut. Col.
Gustave Rose.....Major 2nd Batt.

REGIMENT STAFF OFFICERS.

Thomas P. Cummins.....Capt. and Adjutant
Merle Johnson.....Captain and Q. M.
Arthur W. Neely.....Captain and Comsry.

Department of Judiciary.

SUPREME COURT.

Chief Justice.....A. G. M. Robertson
Associate Justice.....Hon. Antonio Perry
Associate Justice.....Hon. J. T. De Bolt

CIRCUIT COURTS.

First Judge 1st Circuit, Oahu.....
.....Hon. H. E. Cooper
Second Judge 1st Circuit, Oahu.....
.....Hon. W. L. Whitney
Third Judge 1st Circuit, Oahu.....
.....Hon. W. J. Robinson
Second Circuit, Maui...Hon. S. B. Kingsbury
Third Circuit, Hawaii.....
.....Hon. J. A. Matthewman
Fourth Circuit, Hawaii...Hon. C. F. Parsons
Fifth Circuit, Kauai...Hon. Lyle A. Dickey

CLERKS OF COURTS.

Clerk Supreme Court.....J. A. Thompson
Assist. Clerk, Supreme Court. Robt. Parker, Jr.
Stenographer, Supreme Court. Miss Kate Kelly
Bailiff and Librarian Supreme Court....
.....J. M. Ulunahale
Copyists.....Wm. Hoopii, Edith Mossman
Circuit Court, First Circuit.
Chief Clerk and Cashier.....Henry Smith
Assistant Clerk.....Jno. A. Dominis
Clerks, 1st Judge.....
.....J. Batchelor, C. A. K. Hopkins
Clerks, 2nd Judge.....
.....Jno. Marcellino, A. K. Aons
Clerks, 3rd Judge.....
.....M. T. Simonton, V. M. Harrison

Stenographers
 J. L. Horner, H. R. Jordan, J. W. Jones
 Clerk Second Circuit, Maui.....E. H. Hart
 Clerk Third Circuit, Hawaii.....James Ako
 Clerk Fourth Circuit, Hawaii.....
A. S. Le B. Gurney
 W. Ragsdale, Deputy Clerk.
 Clerk Fifth Circuit, Kauai.....Philip L. Rice

COURT INTERPRETERS.

Hawaiian.....C. L. Hopkins, F. W. Beckley
 Japanese.....S. K. Maruyama
 Chinese.....Farm Cornn

DISTRICT MAGISTRATES.

Oahu.

Jas. M. Monsarrat.....Honolulu
 Alexr. D. Larnach, Second.....Honolulu
 S. Hook.....Ewa
 W. D. Holt.....Waianae
 L. B. Nainoa.....Koolauloa
 A. S. Mahaulu.....Waialua
 E. Hore, Second.....Waialua
 E. P. Aikue.....Koolaupoko
 Henry Cobb Adams, Second.....Koolaupoko

Maui.

W. A. McKay.....Wailuku
 Edward C. Robinson.....Lahaina
 Guy S. Goodness.....Makawao
 Edward Wilcox.....Second Makawao
 D. K. Wailehua.....Hana
 J. K. Piimanu.....Second Hana
 C. C. Conradt.....Molokai
 S. K. Kaunamano.....Kalawao
 J. D. McVeigh.....Second Kalawao
 S. Kahoolahalala.....Second Lahaina

Hawaii.

Wm. S. Wise.....Hilo
 W. H. Smith (second).....Hilo
 T. E. M. Osorio.....North Hilo
 R. H. Atkins.....North Kohala
 Thos. Nakanelua.....South Kohala
 Henry Hall.....Hamakua
 M. S. Botelho, Second.....Hamakua
 Jos. S. Ferry.....Puna
 S. H. Haaheo, Second.....Puna
 Walter H. Hayselden.....Kau
 Chas. H. White, Second.....Kau
 J. L. Kaulukou.....North Kona
 Robt. Makahalupa.....South Kona

Kauai.

Chas. S. Dole.....Lihue
 Jas. H. K. Kaiwi, Second.....Lihue
 D. K. Kapahee.....Koloa
 Wm. Schelempfennig, Second.....Koloa
 Wm. Huddy.....Hanalei
 C. B. Hofgaard.....Waimea
 J. A. Akina, Secnd.....Waimea
 R. Puuki.....Kawaihau

COMPILATION COMMISSION.

Chairman.....A. G. M. Robertson
 Members.....A. A. Wilder,, C. F. Clemons

DEPARTMENT OF SECRETARY.

Secretary.....E. A. Mott-Smith
 Chief Clerk of Department.....Henry O'Sullivan
 Eben Cushingham, R. S. Lono.....Clerks

FOREIGN REPRESENTATIVES.

Portugal—Consul General
Senhor A. de Souza Canavarro
 Italy—Consul—F. A. Schaefer (Dean of the
 Consular Corps).
 Austria Hungary—Consul...F. A. Schaefer
 NetherlandsH. M. von Holt
 Norway—ConsulGeo. Rodiek
 Denmark.....C. Hedemann
 GermanyGeo. Rodiek
 Mexico—ConsulW. Lanz
 Peru.....Bruce Cartwright, Jr.
 Chili—Consul.....J. W. Waldron
 Great Britain—Consul.....J. B. Rentiers
 Belgium—Vice-Consul.....R. F. Lange
 Sweden—ConsulGeo. Rodiek
 Spain—Consul.....Ignacio De Arana
 Spain—Vice-Consul.....T. F. Sedgwick
 France—ConsulA. Marques
 Japan—Consul-General.....Hisekichi Eitaki
 China—Consul.....Chen Ching Ho
 Panama—ConsulA. Marques
 Russia—ConsulA. Marques

DEPARTMENT OF ATTORNEY GENERAL.

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 1st Deputy Atty-General.....A. G. Smith
 2nd Deputy Atty-General.....L. P. Scott
 Clerk of Department.....Saml. Upa
 StenographerMiss E. Dwight
 High Sheriff.....Wm. Henry

BOARD OF PRISON INSPECTORS.

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 Wodehouse.
 Maui—Wm. Henning, J. N. K. Keola,
 W. Hawaii—L. S. Aungst, H. H. Renton, M.
 A. Malakaua.
 E. Hawaii—E. N. Holmes, A. B. Lindsay, O.
 E. Wright.
 Kauai—A. S. Wilcox, J. M. Lydgate.

TREASURY DEPARTMENT.

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 Registrar of Public Accounts.....H. C. Hapai
 Deputy Regis. and Bookkeeper...T. Treadway
 Corporation Clerk.....Francis Evans
 Stenographer and Typewriter...E. J. Treadway
 Assistant Clerk.....Saml. Kekumanu

BUREAU OF CONVEYANCES.

Registrar of Conveyances.....C. H. Merriam
 Deputy Registrar.....Isaac Ihihi
 Geo. C. Kopa, Jas. K. Ahloy, Wm. H. Ke-
 awe, Wm. L. Ewaliko, Wm. T. Lee
 Kwai, A. K. Akana, J. A. Hoopale, C.
 W. Tinker, C. F. Wikander, Wai Wing,
 S. V. K. Kakelaka, E. S. Andrews,
 Chas. L. Hook, H. J. Evensen, T. K.
 Maunupau, Clerks.

ASSESSORS AND COLLECTORS.

First Division, Oahu.

Chas. T. Wilder.....	Assessor
A. W. Neely.....	Deputy 1st Division
P. J. Jarrett, H. Sing Fook, V. Fernandez, I. H. Harbottle, R. G. Ross, Ti Mito, John A. Palmer, John Xavier, W. C. King, M. G. K. Hopkins, Deputies, Ho- nolulu; E. K. Lilikalani, Clerk.	
S. L. Kekumano.....	Ewa and Waianae
Edward Hore.....	Waialua
J. Kekuku.....	Koolauloa
H. C. Adams.....	Koolaupoko

Second Division, Maui.

J. H. Kunewa.....	Assessor
J. N. K. Keola.....	Wailuku
G. H. Dunn.....	Lahaina
E. Morton.....	Makawao
W. P. Haia.....	Hana
G. H. Dunn.....	Molokai and Lanai

Third Division, Hawaii.

R. T. Forrest.....	Assessor
E. K. Kaiwa.....	North Hilo
G. H. Kaihenui.....	South Hilo
H. J. Lyman.....	Puna
Geo. Dawson.....	Kau
James Ako.....	North Kona
L. P. Lincoln.....	South Kona
W. P. McDougall.....	North Kohala
Moses Koki.....	South Kohala
C. H. M. Hitchcock.....	Hamakua

Fourth Division, Kauai.

J. K. Farley.....	Assessor
Chas. Blake.....	Koloa
J. K. Kapuniai.....	Waimea
A. G. Kaulukou.....	Lihue
L. B. Boreiko.....	Hanalei
M. R. Teves.....	Kawaihau

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Deputy Auditor.....	G. W. R. King
Clerks—A. May, Jno. W. Vannatta.	
Typist—Geo. Awai.	

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Chief Clerk of Department....	Manuel K. Cook
Clerks.....	O. K. Stillman, B. K. Kane, F. K. Stillman
Stenographers.....	Ethel Carter, A. Wicke
Supt. Water Works and Sewers, Honolulu	
.....	J. M. Little
Clerks Water Works, Honolulu.....	Daniel M. Woodward, H. M. Barfield
Inspectors Water Works, Honolulu—S. Chil- lingworth, Jr.; H. Bishaw, S. Oneha, D. P. Kahanamoku, W. M. Holt, C. K. Holt, D. Hoapili.	
Harbor Master, Honolulu..	Capt. W. R. Foster
Assistant.....	J. F. Haglund
Pilots, Honolulu—Capts. J. C. Lorenson, J. R. Macaulay, R. F. Bennett.	
Harbor Master and Pilot, Hilo.....	
.....	Capt. F. Mosher
Pilot, Kahului.....	Capt. E. H. Parker

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AND STATISTICS.

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Comnr. and Secretary.....	Ralph A. Kearns
Clerk.....	Paul Smith

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Secretary.....	T. M. Church
Jas. Wakefield, F. B. McStocker, C. J. Mc- Carthy.	
R. B. Park.....	Engineer
Frank C. Poor.....	Clerk

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Robt. D. King.....	Office Assistant
S. M. Kanakanui, H. E. Newton, M. E. Lutz, G. Podmore, A. Lando, Assistants.	
Robt. O'Neal.....	Draughtsman
Cecilia Bishaw.....	Stenographer

BOARD OF COMMISSIONERS OF AGRI-
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Commissioners—W. M. Giffard, President and Executive Officer; A. H. Rice, H. M. von Holt, Albert Waterhouse, J. M. Dowsett.	
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David Haags.....	Forest Nurseryman
Joseph F. Rock.....	Consulting Botanist
Bro. M. Newell.....	In Charge Nursery, Hilo
W. D. McBryde.....	In Charge Nursery, Kauai

Division of Entomology.

E. M. Ehrhorn.....	Superintendent of Entomology and Inspector
D. B. Kuhns.....	Inspector's Assistant

Division of Animal Industry.

Victor A. Norgaard, V. S.....	Superintendent and Territorial Veterinarian
Dr. L. N. Case.....	Assistant
Dr. J. C. Fitzgerald, Dep. V. S.....	Maui
Dr. H. B. Elliott, Dep. V. S.....	Hilo
A. R. Glaziver, Dep. V. S.....	Kauai
Mrs. A. Oram.....	Sec. to the Board
Mrs. C. L. Siebolt.....	Clerk

Division of Hydrography.

G. K. Larrison, Superintendent of Hydrogra- phy, District Engineer U. S. Geological Survey.	
J. C. Dort, Office Engineer, Honolulu.	
C. T. Bailey, Engineer in Charge, Islands of Maui and Molokai (Wailuku).	
W. V. Hardy, Engineer in Charge, Island of Kauai (Waimea).	
E. O. Christiansen, Engineer in Charge, Isl- and of Hawaii (Hilo).	
Howard Kimble (Hilo).	
E. E. Goo, Clerk, Honolulu.	

BOUNDARY COMMISSIONERS.

Hawaii.....Wm. S. Wise, C. F. Parson, Hilo
J. A. Matthewman, Kailua
Kauai.....Lyle A. Dickey

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Manuel K. Cook.
Ewa and Waianae—A. Waterhouse, E. O.
White, C. A. Brown.
Waialua—A. S. Mahaulu, R. Kinney, W. B.
Thomas.
Makawao—G. S. Goodness, Hugh Howell, E.
H. Brown.
N. Kona—A. S. Wall, Thos. Silva, J. Kaele-
makule.
S. Kona—E. K. Kaaua, L. P. Lincoln, A.
Hadi.
Kau—Geo. Campbell, C. G. Macomber, G. J.
Becker.
Puna—H. J. Lyman, S. Johnson, F. G. De
Rosa.
Molokai—C. C. Conradt, S. Fuller, J. H.
Mahoe.

LIQUOR LICENSE COMMISSIONERS.

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A. L. Castle.....Chairman
C. A. Long.....Secretary
G. C. Potter, F. D. Lowrey.
County of Maui.

Patrick Cockett.....Chairman
Geo. Copp, L. Weinzheimer, C. D. Lufkin, D.
C. Lindsay.
County of Hawaii.

John T. Moir.....Chairman
R. T. Guard, A. B. Lindsay, W. G. Ogg, S.
M. Spencer.
County of Kauai.

W. H. Rice, Sr.....Chairman
G. N. Wilcox, W. D. McBryde, B. D. Bald-
win, J. R. Meyers.

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Joshua D. Tucker.....Commissioner
Walter A. Engle.....Chief Clerk
Henry Peters.....First Clerk
S. K. Kamaioipili.....Second Clerk
Eileen Bertelman.....Third Clerk
Miss Rose Holt.....Fourth Clerk

Sub-Agents.

1st District, Hilo and Puna. }
2nd District, Hamakua. } G. H. Williams
3rd District, Kona and Kau. } T. C. White
4th District, Maui. } W. O. Aiken
5th District, Oahu. } W. A. Engle
6th District, Kauai. } W. D. McBryde
Miss B. Hundley, Asst.

LAND BOARD.

W. A. Kinney.....Chairman
J. F. Brown.....Secretary
A. W. Carter, R. H. Trent, S. C. Dwight,
F. Andrade.

BOARD OF COMMISSIONERS OF
PUBLIC ARCHIVES.

Chairman, ex-officio.....E. A. Mott-Smith
Commissioners—G. R. Carter, A. G. M. Rob-
ertson.
Librarian.....R. C. Lydecker
Translator.....Stephen Mahaulu

DEPARTMENT OF PUBLIC INSTRU-
TION.

Superintendent.....T. H. Gibson

Commissioners.

Oahu...E. W. Sutton, Mrs. Theo. Richards
Maui.....D. C. Lindsay
Hawaii.....Mrs. B. D. Bond, W. H. Smith
Kauai.....Th. Brandt
Inspector of Schools.....Geo. S. Raymond
Supervising Principals—
Oahu—Mrs. M. W. Gunn, Dist. No. 1; Chas.
E. King, Dist. No. 2.
Maui—Jno. K. Kaaha, A. L. Case.
Hawaii—Bertha B. Taylor, V. A. Carvalho,
Eugene Horner.
Kauai—H. H. Brodie.
Secretary.....Miss Daisy Smith
Asst. Secretary.....C. K. Stillman, Jr.
Stenographers.....
.....H. H. Williams, Miss H. E. Waite
Board of Examiners.
Mrs. M. W. Gunn, Bertha B. Taylor,
Eugene Horner, H. H. Brodie.

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Members—F. C. Smith, Dr. W. C. Hobdy, Geo.
R. Carter, W. W. Thayer (ex-officio),
D. Kalauokalani, Sr., Prof. A. R. Keller.
Secretary.....K. B. Porter
Sanitary Engineer.....S. W. Tay
Chief Sanitary Officer, Oahu.....C. Charlock
Bacteriologist.....Dr. A. N. Sinclair
Registrar Genl. Births, Deaths and Mar-
riages.....Miss M. Hester Lemon
Chief Clerk.....W. K. Simerson
Stenographer.....Miss M. Weir
Food Commissioner and Analyst.....
.....A. W. Hanson
Supt. Insane Asylum.....Dr. W. A. Schwallie
Supt. Leper Settlement.....J. D. McVeigh
Resident Physician.....Dr. W. J. Goodhue
Chief Sanitary Officer, Hawaii—D. S. Bow-
man.
Chief Sanitary Officer, Maui....J. L. Osmer
Chief Sanitary Officer, Kauai—F. B. Cook.

Government Physicians.

Oahu—

A. N. Sinclair.....Honolulu
H. Wood.....Waialua
Geo. B. Tuttle.....Koolaupoko
R. J. McGettigan.....Ewa and Waianae
C. Buffett.....Koolauloa

Maui—

Franklin Burt.....Lahaina
W. F. McConkey.....Makawao and Kula

W. B. Deas.....Hana
 Wm. Osmer.....Wailuku
 F. L. Sawyer.....Puunene and Kihei
 C. P. Durney.....Kula and Upper Makawao

Hawaii—

E. S. Goodhue.....N. Kona
 H. L. Ross.....S. Kona
 J. E. McKillop.....S. Kohala
 B. D. Bond.....N. Kohala
 F. W. Taylor.....Hamakua
 L. L. Sexton.....S. Hilo
 W. D. Whitman.....N. Hilo
 Frederick Irwin.....Puna
 Gurden Potter.....E. Kau
 Martin J. O'Neill.....W. Kau

Kauai—

Carl Keller.....Makaweli
 F. A. Lyman.....Waimea
 A. H. Waterhouse.....Koloa
 F. L. Putnam.....Lihue
 K. Yanagihara.....Hanalei
 K. Hofmann.....Kawaihau

CIVIL SERVICE COM. BRD. HEALTH.

G. P. Denison, W. C. McGonagle, Dr. F. F. Hedemann.

BOARDS OF EXAMINERS.

Medical—Dr. Geo. Herbert, Dr. W. C. Hobdy,
 Dr. Jas. R. Judd.
 Pharmacy—A. J. Gignoux, S. S. Peck, Dr. F. F. Hedemann.
 Dental—P. F. Frear, H. Bicknell, A. J. Derby.

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 Drs. W. L. Moore, G. H. Herbert.

PANAMA PACIFIC EXPOSITION COMMISSION.

H. P. Wood.....Chairman
 J. A. Hughes, J. N. S. Williams, C. E. Wright,
 John Wise.

CONSERVATION BOARD.

J. P. Cooke, J. W. Caldwell, E. V. Wilcox.

PUBLIC UTILITIES COMMISSION.

Established 1913.

Chairman.....E. A. Mott-Smith
 Members.....J. N. S. Williams, A. J. Gignoux

PACKET AGENCIES.

Matson's Line Sailing Vessels San Francisco—
 C. Brewer & Co., Ltd.
 Canadian and Australian S. S. Line—Theo.
 H. Davies & Co., Ltd.

Oceanic S. S. Co.'s Line—C. Brewer & Co., Ltd.
 Pacific Mail S. S. Co.—H. Hackfeld & Co., Ltd.
 European Packets—H. Hackfeld & Co., Ltd.
 American-Hawaiian S. S. Co.—H. Hackfeld & Co., Ltd.
 Matson Nav. Co.—Castle & Cooke, Ltd.
 Toyo Kisen Kaisha Line—Castle & Cooke, Ltd.

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President.....Geo. R. Carter
 Vice-President.....F. C. Atherton
 Secretary and Treasurer.....H. P. Wood
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MERCHANTS' ASSOCIATION.

Organized March 18, 1901.

President.....O. C. Swain
 Vice-President.....Geo. G. Guild
 Secretary.....O. A. Bierbach
 Treasurer.....M. M. Johnson
 Directors—Geo. A. Brown, T. M. Church, J. D. Dougherty, J. F. Soper, Ed. Towse.

MAUI CHAMBER OF COMMERCE.

Organized Jan. 29, 1910.

President.....G. F. Baldwin
 Vice-President.....R. A. Wadsworth
 Secretary.....H. W. Rice
 Treasurer.....C. D. Lufkin

HILO BOARD OF TRADE.

Organized

President.....Dr. H. B. Elliott
 Vice-President.....F. F. Metzger
 Secretary-Treasurer.....E. N. Deyo
 Directors—A. Lindsay, E. F. Nichols, R. W. Filler, W. S. Wise, Wm. McKay, H. B. Mariner.

KAUAI CHAMBER OF COMMERCE.

Organized 1913.

President.....H. Rohrig
 Secretary.....Ernest Behr
 Treasurer.....E. Mahlum

HAWAII PROMOTION COMMITTEE.

Representing the Territory of Hawaii, Chamber of Commerce and Merchants' Association.

Organized 1903.

Fred. L. Waldron, Chairman; Ed. Towse.
 Vice Chairman; Geo. G. Guild, Fred. C. Smith, Albert Waterhouse.
 H. P. Wood.....Director
 H. von Damm.....Treasurer

HONOLULU STOCK AND BOND EX-
CHANGE.

Organized August 8, 1893.

President.....R. H. Trent
 Vice-President.....Wm. P. Roth
 Secretary.....A. J. Campbell
 Treasurer.....Trent Trust Co.

HAWAIIAN SUGAR PLANTERS' ASSO-
CIATION.

Re-organized Nov. 18, 1895.

President.....E. F. Bishop
 Vice-President.....F. A. Schaefer
 Secretary and Treasurer.....W. O. Smith
 Assistant Sec.-Treas.....L. J. Warren
 Auditor.....G. H. Robertson
 Trustees—F. A. Schaefer, E. D. Tenney, E. F.
 Bishop, J. F. Hackfeld, F. M. Swanzy,
 J. P. Cooke, J. M. Dowsett, A. W. T.
 Bottomley, W. O. Smith.

EXPERIMENT STATION OF PLANTERS'
ASSOCIATION.

Experiment Station Staff.

H. P. Agee.....Director
 R. C. L. Perkins.....Entomologist
 Noel Deerr.....Sugar Technologist
 H. L. Lyon.....Pathologist
 S. S. Peck.....Chemist
 A. Koebele.....Consulting Entomologist
 R. S. Norris, Technical Chemist; F. R. Werth-
 mueller, Earl C. Lane, Assistant Chem-
 ists.
 Otto H. Swezey.....Acting Entomologist
 F. Muir.....Associate Entomologist
 H. T. Osborn.....Assistant Entomologist
 L. D. Larsen, A. T. Speare.....
 Assistant Pathologists
 W. P. Naquin.....Acting Agriculturist
 D. C. Broderick, Sub-Station Superintendent
 C. W. Kiesel.....Field Foreman
 G. H. Tuttle.....Cashier
 W. R. R. Potter.....Illustrator
 H. B. Campbell.....Bookkeeper
 A. Warren.....Clerk
 S. J. Cunningham.....Stenographer
 J. F. Melanphy.....Fertilizer Sampler

HAWAIIAN SUGAR CHEMISTS' ASSO-
CIATION.

President.....H. E. Savage
 Vice-President.....Dr. W. P. Kelley
 Secretary-Treasurer.....S. S. Peck
 Executive Committee—F. E. Greenfield, Dr.
 R. S. Norris, C. C. James, H. Johnson,
 H. E. Hadfield, F. T. Dillingham.

HAWAIIAN ENTOMOLOGICAL SOCIETY.

Organized 1905.

President.....F. Muir
 Vice-President.....W. M. Giffard
 Secretary and Treasurer.....O. H. Swezey
 The above officers also constitute the Executive
 Committee.

BOARD OF MARINE UNDERWIT-
ERS—AGENCIES.

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 Philadelphia.....C. Brewer & Co.
 New York.....Bruce Cartwright
 Liverpool.....Theo. H. Davies & Co.
 Lloyds, London.....Theo. H. Davies & Co.
 San Francisco.....Bishop & Co.
 Bremen.....F. A. Schaefer

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TERRITORY OF HAWAII.

J. A. Gilman.....President
 B. von Damm.....Vice-President
 A. R. Gurrey.....Secretary
 Bishop & Co.....Treasurer
 Audit Co. of Hawaii.....Auditor

QUEEN'S HOSPITAL.

Erected in 1860.

President.....F. J. Lowrey
 Vice-President.....W. E. Brown
 Secretary.....Geo. W. Smith
 Treasurer.....Geo. C. Potter
 Auditor.....Jno. Waterhouse
 Surgeons—Drs. W. C. Hobdy, Jas. R. Judd.
 Physicians—Drs. H. V. Murray, W. R. Benz
 Resident Physician.....Dr. A. C. Rothrock
 Internes.....Drs. Wm. T. Dunn, A. R. Thomas
 Specialist.....Dr. W. G. Rogers
 Superintendent.....J. F. Eckardt
 Asst. Supt.....Chas. J. Meinke
 Bookkeeper.....Miss Ethel Fairweather
 Head Nurse.....Miss Mary Sewall
 Housekeeper.....Mrs. F. Kahlmann
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 Gartlev, G. W. Smith, H. M. von Holt,
 J. A. McCandless, G. C. Potter.

LEAHI HOME.

Organized April 4, 1900.

President.....F. C. Atherton
 Vice-President.....Geo. P. Castle
 Secretary.....Geo. F. Davies
 Treasurer.....A. W. T. Bottomley
 Auditor.....J. P. Cooke
 Medical Supt.....A. N. Sinclair, M. B. C. M.
 Asst. Supt.....H. Taylor
 Matron.....Mrs. H. Taylor
 Trustees—J. P. Cooke, F. C. Atherton, T.
 Clive Davies, A. W. T. Bottomley, Geo.
 P. Castle, C. Montague Cooke.

CHILDREN'S HOSPITAL.

Opened Nov. 24, 1909.

President.....S. B. Dole
 Vice-President.....Geo. P. Castle
 Secretary.....Goldie G. Gurney
 Treasurer.....W. O. Smith
 Auditor.....Audit Co. of Haw.
 Superintendent.....Miss J. N. Dewar
 Trustees—S. B. Dole, W. O. Smith, G. P.
 Castle, A. S. Wilcox, Allen Herbert, Geo.
 B. Isenberg, E. A. Mott-Smith.

SAILORS' HOME SOCIETY.

Organized 1853. Meets annually in December.

President.....F. A. Schaefer
 Secretary.....J. C. Cook
 Treasurer.....C. H. Atherton
 Executive Committee—W. M. Giffard, F. W. Damon, B. F. Dillingham, E. D. Tenney.

CIVIC FEDERATION.

Organized Jan. 26, 1905.

President.....J. M. McChesney
 Vice-President.....A. F. Cooke
 Secretary.....H. Gooding Field
 Treasurer.....C. H. Dickey

TERRITORIAL LIBRARY.**HONOLULU LIBRARY ASSOCIATION.**

Organized March. Incorporated June 24, 1879.

President.....Prof. M. M. Scott
 Secretary.....J. H. Fisher
 Treasurer.....A. Gartley
 Auditor.....J. H. Fisher

HAWAIIAN HISTORICAL SOCIETY.

Organized Jan. 11, 1892.

President.....Geo. R. Carter
 Vice-Presidents.....C. H. Hitchcock, A. F. Judd, Thos. G. Thrum
 Recording Secretary.....Edgar Wood
 Cor. Secretary.....H. M. Ballou
 Treasurer.....W. D. Westervelt
 Librarian.....Miss E. I. Allyn

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A. Lewis, Jr.....President
 J. R. Galt.....Treasurer
 W. H. Babbitt.....Secretary
 C. H. Atherton, P. L. Weaver, J. H. Fisher, R. B. Anderson.

Library Staff.

Edna I. Allyn.....Librarian
 Carlotta M. Roscoe.....Loan Desk Assistant
 Elizabeth M. Richards.....Cataloguer
 Carrie P. Green.....Reference Librarian
 Mary P. Lawrence.....Children's Librarian
 Margaret Peterson.....Assistant
 Mariano B. Araullo.....Clerk
 George Hutchings, Philip Ovenden.....
Student Pages

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 John F. G. Stokes.....
Curator of Polynesian Ethnology
 Miss E. B. Higgins.....Librarian
 C. Montague Cooke, Jr., D. Ph.....
Curator of Pulmonata
 C. N. Forbes.....Curator of Botany
 Mrs. E. Helvie.....
Superintendent of Exhibition Halls
 J. W. Thompson.....Modeler
 John J. Greene.....Printer
 August Perry.....Assistant Printer
 A. De Witt Alexander.....
Director's Assistant

BAR ASSOCIATION OF HAWAII.

Organized June 28, 1899.

President.....F. E. Thompson
 Vice-President.....C. R. Hemenway
 Secretary.....E. W. Sutton
 Treasurer.....C. H. Olson

HAWAIIAN PHILATELIC SOCIETY.

Organized April 13, 1911.

President.....Jno. T. Gribble
 Vice-President.....W. C. Parke
 Secretary.....A. C. O. Linneman
 Treasurer.....B. F. Beardmore
 Trustees—B. Cartwright, Jr., E. M. Ehrhorn, C. J. Cooper.

Y. M. C. A. CHESS CLUB.

Organized Oct. 17, 1913.

President.....F. S. Hafford
 Vice-President.....A. L. Mackaye
 Sec. Treas.....A. E. Larimer

HAWAIIAN MEDICAL ASSOCIATION.

Organized May 24, 1895.

President.....Dr. H. V. Murray
 Vice-President.....Dr. F. L. Morong
 Secretary.....Lt. Col. F. P. Reynolds
 Treasurer.....Dr. H. P. Nottage
 Directors..Dr. C. B. Wood, Dr. J. S. B. Pratt

HAWAIIAN SOCIETY SONS OF THE AMERICAN REVOLUTION.

Organized June 17, 1895.

President.....Perley L. Horne
 Vice-President.....W. R. Castle
 Secretary.....Wm. C. Parke
 Treasurer.....W. J. Forbes
 Registrar.....H. C. Mohr
 Board of Managers—F. B. McStocker, A. F. Cooke, Dr. S. D. Barnes.

ALOHA CHAPTER, DAUGHTERS OF THE AMERICAN REVOLUTION.

Regent.....Mrs. P. L. Horne
 Vice-Regent.....Mrs. J. M. Atherton
 Recording Secretary...Miss Agnes E. Judd
 Corresponding Secretary..Miss Abbie M. Dow
 Treasurer.....Miss Charlotte Hall
 Registrar.....Mrs. W. A. Bryan
 Historian.....Mrs. A. Gartley
 Chaplain.....Mrs. A. Francis Judd

HAWAIIAN EVANGELICAL ASSOCIATION.

Originally Organized 1823.

Constitution revised 1863. Annual Meeting June.

President.....P. C. Jones
 Vice-President.....F. J. Lowrey
 Cor. Secretary.....Rev. Wm. B. Oleson
 Rec. Secretary.....Rev. J. L. Hopwood
 Treasurer.....Theo. Richards
 Auditor.....Wm. J. Forbes

WOMAN'S BOARD OF MISSIONS.

Organized 1871.

President.....Mrs. Theo. Richards
 Vice-Presidents—Mrs. D. Scudder, Mrs. W. J. Forbes, Mrs. J. P. Erdman, Mrs. G. H. Gere.
 Recording Secretary.....Miss M. L. Sheeley
 Home Cor. Secretary.....Mrs. H. Webster
 Foreign Cor. Secretary.....Miss A. E. Judd
 Treasurer.....Mrs. B. F. Dillingham
 Asst. Treasurer.....Mrs. W. L. Moore
 Auditor.....O. C. Swain

MISSION CHILDREN'S SOCIETY.

Organized 1851. Annual Meeting in June.

President.....F. C. Atherton
 Vice-President.....A. F. Judd
 Secretary.....Mrs. R. W. Andrews
 Recorder.....R. W. Andrews
 Treasurer.....L. A. Dickey

YOUNG MEN'S CHRISTIAN ASSOCIATION.

Organized 1869. Annual Meeting in April

President.....R. H. Trent
 Vice-President.....W. G. Hall
 Rec. Secretary.....Robt. Anderson
 Treasurer.....F. C. Atherton
 General Secretary.....Paul Super
 Men's Secretary.....A. E. Larimer
 Religious Work Secretary...L. R. Killam
 Physical Director.....Fred. W. Lau
 Boys' Work Secretary.....Chas. F. Loomis
 Asst. Boys' Work Secretary...R. M. Cross
 Business Secretary.....F. H. Emmons
 Educational Secretary.....J. A. Urice
 Office Secretary.....Waldo Heinrich
 Boys' Extension Secretary..G. E. Jackson
 Japanese Branch.....B. M. Matsugawa

YOUNG WOMEN'S CHRISTIAN ASSOCIATION.

Organized 1900.

President.....Mrs. L. Tenney Peck
 Vice-Presidents...Mrs. H. Hendricks,
 Mrs. A. F. Cooke, Mrs. Ida Weedon
 Secretary.....Mrs. Arthur Jones
 Corresponding Secretary..Mrs. Chas. T. Fitts
 Treasurer.....Mrs. Alexr. Lindsay
 General Secretary.....E. M. Erickson

WOMAN'S CHRISTIAN TEMPERANCE UNION OF HAWAII.

Organized December, 1884.

President.....Mrs. J. M. Whitney
 Vice-Presidents—Mrs. D. Scudder, Mrs. J. W. Wadman, Mrs. Ida Weedon.
 Recording Secretary...Miss Florence Yarrow
 Cor. Secretary.....Mrs. E. W. Jordan
 Treasurer.....Mrs. L. B. Coan

FREE KINDERGARTEN AND CHILDREN'S AID ASSOCIATION.

Organized 1895.

President.....Mrs. Richard Ivers
 Vice-Presidents—Mrs. L. T. Peck, Mrs. A. Lewis, Jr., Mrs. S. B. Dole.
 Recording Secretary.....Miss Nora Sturgeon
 Treasurer.....Mrs. F. M. Swanzy
 Auditor.....D. W. Anderson

ASSOCIATED CHARITIES.

Organized June 7, 1899.

President.....S. B. Dole
 1st Vice-President.....W. D. Westervelt
 2nd Vice-President.....J. R. Galt
 Secretary.....Mrs. J. M. Whitney
 Treasurer.....P. H. Deverill
 Manager.....Mrs. E. W. Jordan

STRANGERS' FRIEND SOCIETY.

Organized 1852. Annual Meeting in June.

President.....Mrs. A. Fuller
 Vice-Presidents—Mrs. E. F. Bishop, Mrs. S. B. Dole.
 Secretary.....Mrs. S. M. Damon
 Treasurer.....Mrs. E. W. Jordan
 Auditor.....E. W. Jordan
 Directress.....Mrs. E. B. Waterhouse

BRITISH BENEVOLENT SOCIETY.

Organized 1869.

President (Ex-officio).....H. B. M's. Consul
 Secretary.....R. Catton
 Treasurer.....George F. Davies
 Relief Committee—G. R. Ewart, J. C. Cook,
 W. H. Baird, F. Harrison and R. Anderson, with the above officers.

GERMAN BENEVOLENT SOCIETY.

Organized August 22, 1856.

President.....F. A. Schaefer
 Vice-President.....

Secretary.....John F. Eckardt
Treasurer.....B. von Damm
Auditor.....H. Hugo

HAWAIIAN RELIEF SOCIETY.

Organized 1895.

President.....Mrs. C. S. Holloway
Secretary.....Mrs. E. S. Cunha
Treasurer.....Mrs. F. W. Macfarlane

PORTUGUESE CHARITABLE SOCIETY.

Organized Sept. 1, 1902.

President.....J. P. Rodriguez
Vice-President.....J. Madeira
Secretary.....A. H. R. Vieira
Treasurer.....J. D. Marques

SAN ANTONIO BENEVOLENT SOCIETY.

President.....M. R. Bisho
Secretary.....M. R. Pereira

LUSITANA BENEVOLENT SOCIETY.

President.....J. B. Rego
Secretary.....M. J. Coito

SPANISH MUTUAL AID SOCIETY VICTORIA ALFONSO.

Organized Feb., 1912.

President.....Ignacio De Arana

CATHOLIC ORPHANAGE, KALIHI.

Established 1909.

Mother Mary Lawrence in charge.

HAWAIIAN HUMANE SOCIETY.

President.....Mrs. S. B. Dole
Vice-Presidents—Mrs. L. L. McCandless, Mrs.
S. M. Damon, Mrs. E. P. Low, Miss
Lucy Ward, Mrs. R. M. Buffington, Mrs.
G. Sherman.

Secretary.....Miss Florence Gurrey
Treasurer.....Mrs. J. S. Emerson
Auditor.....W. L. Whitney

OAHU CEMETERY ASSOCIATION.

President.....Geo. R. Carter
Vice-President.....F. J. Lowrey
Secretary and Treasurer.....J. R. Galt

ANTI-SALOON LEAGUE OF HONOLULU, T. H.

Organized March 4, 1901.

President.....D. C. Peters
Vice-President.....Rev. W. D. Westervelt
Vice-Pres. Honorary.....Mrs. J. M. Whitney
Secretary.....Geo. W. Paty
Treasurer.....C. H. Dickey

PACIFIC CLUB.

Organized 1852. Premises on Alakea Street,
two doors below Beretania.

President.....F. M. Hatch
Vice-President.....H. Focke
Secretary.....Geo. C. Potter
Treasurer.....J. L. Cockburn
Governors—C. S. Holloway, F. W. Klebahn,
A. J. Campbell, H. M. Whitney, A. A.
Wildner, with the above officers, comprise
the Board.

UNIVERSITY CLUB.

Organized 1905.

President.....Chas. R. Hemenway
Vice-President.....A. F. Judd
Secretary.....R. B. Anderson
Treasurer.....A. M. Nowell
Auditor.....M. M. Graham
Governors—Gen. M. M. Macomb, Dr. H. V.
Murray, Ranney Scott.

CORNELL CLUB OF HAWAII.

President.....Prof. A. L. Andrews
Vice-President.....Chester J. Hunn
Secretary-Treasurer.....Dr. L. E. Case

HARVARD CLUB OF HAWAII.

P. L. Horne.....President
Ralph S. Hosmer, '94.....Secretary-Treasurer
Executive Committee—With the above, Dr.
F. F. Hedemann, E. A. Mott-Smith, E.
A. Knudsen.

COMMERCIAL CLUB OF HONOLULU.

Organized Aug. 30, 1906.

President.....G. H. Angus
Vice-President.....Fred. C. Smith
Secretary.....Fred. Hons
Treasurer.....H. Stewart Johnson

SCOTTISH THISTLE CLUB.

Organized April 27, 1891.

Chief.....Peter Tosh
Chieftain.....M. M. Graham
Secretary.....D. M. Thompson
Treasurer.....J. H. Fiddes
Master-at-Arms.....P. Higgins
Club Rooms, 11 and 12 Young Building.
Meetings 2nd and 4th Fridays, 7:30 p. m.

BUCKEYE CLUB.

Organized 1904.

President.....Rev. W. D. Westervelt
Vice-President.....Paul Super
Secretary.....Mrs. Ida Weedon
Treasurer.....Dr. W. G. Rodgers

COUNTRY CLUB.

Organized 1906.

President.....H. H. Walker
 1st Vice-President.....Geo. H. Angus
 2nd Vice-President.....W. H. McNerny
 Secretary.....G. H. Buttolph
 Treasurer.....J. O. Young
 Auditor.....Audit Co. of Hawaii
 Directors—W. Simpson, C. G. Bockus, E. W. Sutton, W. E. Brown.

HAWAIIAN ENGINEERING ASSOCIATION.

Organized

Chairman.....R. Renton Hind
 Vice-Chairman.....W. G. Hall
 Secretary.....F. O. Boyer
 Treasurer.....Irwin Spalding

TRAIL AND MOUNTAIN CLUB.

Organized April 5, 1910.

President.....W. R. Castle
 Vice-President.....L. A. Thurston
 Recording Secretary.....Irwin Spalding
 Corresponding Sec.....Alex. Hume Ford
 Treasurer.....Waterhouse Trust Co.

OUTRIGGER CLUB.

Organized May, 1908.

President.....Guy H. Tuttle
 Vice-President.....A. M. Nowell
 Secretary.....J. A. Beavens
 Treasurer.....H. B. Campbell

HUI NALU (Surf Club).

Organized 1911.

President.....Wm. T. Rawlins
 Vice-President.....Lew G. Henderson
 Secretary.....W. H. D. King
 Treasurer.....Alex. May
 Commodore.....E. K. Miller
 Captain.....Duke Kahanamoku

HAWAII YACHT CLUB.

Organized Oct., 1901.

Commodore.....F. M. Hatch
 Vice-Commodore.....F. B. Smith
 Secretary and Treasurer.....L. M. Vettleson
 Measurer.....O. L. Sorenson
 Captain.....C. T. Wilder

MYRTLE BOAT CLUB.

Organized Feb. 5, 1883.

President.....I. Spalding
 Vice-President.....F. Schnack
 Secretary.....A. J. Porter
 Treasurer.....G. D. Center
 Captain.....G. E. Schaefer

HEALANI YACHT AND BOAT CLUB.

Incorporated Dec., 1894.

President.....Jas. E. Jaeger
 Vice-President.....A. T. Longley
 Secretary.....A. R. L. Rowat

Treasurer.....H. Lempke
 Captain.....Lawrence Cunha
 Vice-Captain.....G. C. Bechert
 Commodore.....L. M. Hale
 Vice-Commodore.....Geo. McKinley

HAWAIIAN ROWING ASSOCIATION.

President.....Jas. E. Jaeger
 Vice-President.....G. E. Schaefer
 Secretary-Treasurer.....I. Spalding

HAWAIIAN ASSOCIATION OF THE A. A. U.
Organized 1912.

President.....W. T. Rawlins
 Vice-President.....A. L. Longley
 Secretary-Treasurer.....Lorrin Andrews
 The Association comprises one delegate from each of the fifteen local athletic clubs.

OAHU COLLEGE.

President—Arthur F. Griffiths, A.M.
 Susan G. Clark—Latin and Greek.
 Levi C. Howland—Head of Commercial Department, Asst. Business Agent.
 Wilbur J. MacNeil.....Science
 Antoinette J. Foster—English.
 Charlotte P. Dodge—History.
 Margaret E. Clarke—Head of Music Dept.
 Eda M. Schmutzler—French.
 Chas. F. Schmutzler—German, Latin.
 Ernest T. Chase, Vice-Principal—Mathematics.
 Daniel J. Ricker—Mathematics.
 Carl Miltner—Violin.
 Helen G. Cadwell—Voice.
 Clara M. Brawthen—Commercial.
 Ethel V. Crosby—Drawing.
 Ethel M. Damon—German, History.
 John C. Wine—English.
 Agnes P. Driver—Physical Instruction of Girls.
 Marjorie Gilman—Assistant.
 Frank E. Midkiff—Mathematics, Science.
 Lillian G. Brawthen—Piano.
 Catherine E. B. Cox—Oral Expression, Dramatics.
 Olive V. Crosno—Vocal Music.
 Ethel V. Bettison—English.
 Mrs. Maud Taylor—Matron.
 Mary L. Bettis, Grace P. Boardman—Assistant Matrons.
 Vivien C. Mackenzie—Librarian.
 Mabel M. Hawthorne—Assistant Librarian.
 Jona. Shaw—Business Manager.
 Frank Barwick—Supt. of Grounds.
 H. G. Wooten—Engineer.
 Hazel Buckland—Office Secretary.
 F. F. Hedemann, M. D.—Medical Examiner.

PUNAHOU PREPARATORY.

Charles T. Fitts—Principal.
 Mary P. Winne—Vice-Principal; Second Grade.
 Mary G. Borden, B. M. Folsom, Z. L. Watkins, Fifth Grade.
 Claire H. Uecke—First Grade.
 Florence N. Carter—Fourth Grade.
 Anna F. Johnson, F. Davis—Sixth Grade.
 Zella M. Breckenridge, E. Holmes—Eighth Grade.

Anna L. Alderdice, H. H. Harrison—Third Grade.
 Emma Barnhard—Intermediate.
 Ada E. Bentley, E. E. Middleditch—Seventh Grade.
 Maude E. Martin—Fourth Grade, Assistant.
 Clara A. Wilson—Fourth Grade, Drawing.
 Agnes P. Driver—Physical Instructor of Girls.
 Olive V. Crosno—Vocal Music.

REGENTS COLLEGE OF HAWAII.

H. E. Cooper.....President
 C. M. Cooke.....Treasurer
 A. Gartley, R. S. Hosmer, C. R. Hem-enway.

College of Hawaii Faculty.

John W. Gilmore, M.S.A.—President (re-signed).
 John S. Donaghho, A.B.—Acting Dean, Professor of Mathematics and Astronomy.
 John M. Young, B.S., M.M.E.—Professor of Engineering and Engineer for the College.
 William A. Bryan, B.S.—Professor of Zoology.
 Arthur R. Keller, C.E., LL.B.—Professor of Civil Engineering.
 Frank T. Dillingham, B.S.—Professor of Chemistry.
 Howard M. Ballou, A.B.—Professor of Physics
 Arthur L. Andrews, M.L., Ph.D.—Professor of English.
 Frederick G. Krauss—Professor of Agronomy.
 Vaughan MacCaughy, B.S.A.—Professor of Botany and Horticulture.
—Professor of Entomology.
 Minnie E. Chipman—Assistant Professor of Ceramics.
 Florence M. Lee, B.S.—Assistant Professor of Domestic Science.
 Mildred M. Yoder, Ph.B.—Instructor in History and Economics.
 Rudolph Zurbuchen—Instructor in German.
 John T. McTaggart—Instructor in Shop Work.
 Emily Farley—Instructor in French.
 Elizabeth L. Bryan, Sc.D.—Librarian.
 Joseph F. C. Rock—Botanist (on leave).

KAWAIAHAO GIRLS' SEMINARY.

Miss Mabel E. Bosher—Principal.
 Grammar Grades—Ruth W. Henry, C. Rouwenhorst, Bertha Kemp, Rose Faast.
 Teacher of Music—Alma A. Mills.
 Domestic Art—Francis M. Goad.
 Hygiene, House Mother—Mary Warne.
 Domestic Science—Miss Louise M. Larrabee, Esther Kalino.
 Assistant—Tai Moi Ting.
 Wai Hung Lo, Chinese, and Tsuru Kishimoto, Japanese Classes.

MILLS INSTITUTE.

Rev. W. P. Ferguson, Ph.D.—Principal.
 Rev. John P. Erdman, B.A.—Dean of Department of Christian Ministry.
 Rev. R. B. Whitaker—Chaplain.
 Mrs. Ella Peabody Osborne—House Mother.
 Robert Hart Wallin, M.A.—Director Comrel. Dept., Registrar and Bookkeeper.

Wm. H. Meinecke—Director Agricultural Dept.
 Messrs. M. L. Copeland, M. G. Greenly, C. H. Hogan, J. F. Nelson, Jno. F. Stone, E. H. Yates.
 Misses E. J. Jones, J. Peabody, M. E. Stambaugh.
 Mr. Tong Kwan Yan—Chinese.
 Mr. Yasaburo Sakai—Japanese.
 Mr. Cheai Myeng Han—Korean.

FACULTY OF THE KAMEHAMEHA SCHOOLS.

Perley L. Horne—President.
 Rev. John L. Hopwood—Chaplain.
 Alfred B. Sill—Registrar and Bus. Agent.
 Miss Z. M. Hummell—Bookkeeper.
 Dr. James R. Judd—Physician.

Manual Department, School for Boys.

Ulrick Thompson—Vice-President, Science.
 Mrs. Alice M. Bradstreet—Matron.
 Chester G. Livingston—Mechanical Drawing.
 Miss Minnie H. Armstrong—English.
 Earle G. Bartlett—Science and Mathematics.
 Nelson G. Smith—Painting.
 John Mengel—Blacksmithing.
 Adolph G. Hottendorf—Printing.
 Charles G. Collais—Supt. of Mechanical Instruction.
 Milton E. Crossman—Carpentry.
 Miss Della Sturm—Nurse.
 Joseph T. Boyd—Machinist.
 Geo. Benjamin—Assistant Carpentry.
 Lieut. George E. Turner—Commandant.
 Miss Emma Winslow—English.
 George A. Andrus—Music and Mathematics.
 Edwin E. Baty—Electrician.
 R. J. Borden, J. D. French—Agriculture.

School for Girls.

Miss Ida K. Pope—Principal.
 Miss Frances A. Lemmon—Mathematics.
 Miss Harriet E. McCracken—Matron.
 Miss Carolyn E. Church—Sewing.
 Miss Anna M. Reid—English.
 Miss Katharyn Burgner—Nature Study.
 Miss Katherine Pope—History.
 Miss Lydia K. Aholo—General Assistant.
 Miss Ora L. Saunders—Nurse.
 Miss Florence Smith—Dressmaking.
 Miss Lydia Williamson—Domestic Art.
 Miss Alice Jones—Domestic Science.
 Miss Edith Gatfield—Music.
 Assistants—Misses Irene Sylva, Emma Napoleon, Katie Stewart, Eliza Nainoa.

Preparatory School for Boys.

Miss Alice E. Knapp—Principal.
 Miss Maude Post—Primary.
 Miss Jennie Brooks—Matron.
 Miss Anna Roat—Third and Fourth Grades.
 Miss Edith M. Aldrich—Manual Training.
 Miss Agnes Hill—First and Second Grades.
 Assistants—Misses Lucilla Kamakawioole, Lily Kekuewa, Julia Toomey, Julia Coleman.

HONOLULU (STEAM) FIRE DEPARTMENT.

Originally organized 1851, and conducted as volunteers till March 1, 1893, when it was changed to a paid department.

Chief Engineer—Chas. Thurston.
Asst. Engineer—Wm. Blaisdell.
Honolulu Engine No. 1—Location, Central Station, cor. Fort and Beretania streets.
Mechanic Engine No. 2—Location, Central Station, cor. Fort and Beretania streets.
Chemical Apparatus No. 3—Location, Central Station, cor. Fort and Beretania streets.
Protection Hook and Ladder Co. No. 1—Location, Central Station, cor. Fort and Beretania streets.
Engine Co. No. 4—Location cor. Wilder avenue and Piikoi street.
Engine Co. No. 5—Location King street, near Reform School.
Engine Co. No. 6—Location Kaimuki.

PRINCIPAL PUBLICATIONS.

The Hawaiian Gazette, issued semi-weekly by the Hawaiian Gazette Co., Ltd., on Tuesdays and Fridays. R. O. Matheson, Editor.
Sunday Advertiser, issued every Sunday morning by the Hawaiian Gazette Co., Ltd. R. O. Matheson, Editor.
The Daily Pacific Commercial Advertiser, issued by the Hawaiian Gazette Co. every morning (except Sunday). R. O. Matheson, Editor.
The Honolulu Star-Bulletin, issued every evening (except Sundays), by the Honolulu Star-Bulletin, Ltd. Riley H. Allen, Editor. Semi-weekly issued on Mondays and Thursdays.
The Guide, issued every Tuesday and Friday morning by the Guide Pub. Co.
The Friend, Organ of the Hawaiian Board, issued on the first of each month. Rev. Doremus Scudder, Editor.
The Hawaiian Church Chronicle, issued on the first Saturday of every month. Rt. Rev. H. B. Resterick, Editor.
The Paradise of the Pacific, issued monthly. Mrs. W. M. Langton, Publisher.
The Mid-Pacific Monthly, an illustrated descriptive magazine. Alex. Hume Ford, Editor and Publisher.
The Hawaiian Forester and Agriculturist, issued monthly under direction of Board of Com. Agr. and Forestry. Daniel Logan, Editor.
Tropic Topics, issued weekly on Fridays. H. M. Ayers, Editor and Publisher.
The Kuokoa (native), weekly, issued every Friday morning by the Hawaiian Gazette Co., Ltd. Solomon Hanohano, Editor.
Aloha Aina (native) issued every Saturday. D. K. Kahaulelio, Editor.
Ka Holomua (native), issued each Saturday. G. K. Poepeo, Editor.
O Luso (Portuguese), issued weekly on Saturdays. M. G. Santos, Editor.
Chee Yow Shin Bo (The Liberty News), tri-weekly, Chinese.
Sun Chung Kwock Bo, tri-weekly, Chinese.
Hawaii Shinpo, issued daily in Japanese. S. Sheba, Proprietor.
Hilo Tribune, issued weekly on Saturdays by the Tribune Pub. Co., Hilo. H. W. Kinney, Editor.
The Hawaii Herald, issued weekly at Hilo on Thursdays by the Herald Pub. Co. J. B. McSwanson, Editor.
The Kohala Midget, issued each Thursday, at Kohala. Dr. J. F. Cowan, Editor.

The Maui News, issued weekly at Wailuku, Maui. V. L. Stevenson, Editor and Manager.
The Garden Island, issued weekly at Lihue, Kauai. L. D. Timmons, Editor.
Hoku o Hawaii, issued on Friday of each week, at Hilo. Rev. S. L. Desha, Editor.
THE HAWAIIAN ANNUAL, issued the latter part of December for the following year. Thos. G. Thrum, Editor and Publisher.

HONOLULU LODGES, ETC.

Oceanic Lodge No. 371, F. & A. M.; meets on the last Monday in each month in Masonic Hall.
Hawaiian Lodge, No. 21, F. & A. M.; meets in its Hall, Masonic Temple, corner Hotel and Alakea streets, on the first Monday in each month.
Honolulu Chapter, No. 1, R. A. M.; meets in Masonic Hall on the third Thursday of each month.
Honolulu Commandery, No. 1, Knights Templar; meets in Masonic Hall on second Thursday of each month.
Mystic Shrine, Aloha Temple. No stated time of meeting. Meets at Masonic Hall.
Kamehameha Lodge of Perfection, No. 1, A. & A. S. R.; meets in Masonic Hall on the fourth Thursday of each month.
Nuuanu Chapter of Rose Croix, No. 1, A. & A. S. R.; meets in Masonic Hall on the first Thursday in the month.
Alexander Liholiho Council, No. 1, of Kadosh; meets on the third Monday of alternate months from February.
Honolulu Lodge, No. 409, F. & A. M.; meets at Masonic Hall every second Monday of the month.
Leahi Chapter, No. 2, Order of the Eastern Star; meets on third Monday of each month in Masonic Hall.
Lei Aloha Chapter, No. 3, Order of the Eastern Star; meets on second Saturday of each month in Masonic Temple.
Harmony Chapter, No. 4, Order of the Eastern Star, meets on third Saturday of each month in Masonic Temple, at 7:30 p. m.
Excelsior Lodge, No. 1, I. O. O. F.; meets at the hall in Odd Fellows' Building, on Fort St., every Tuesday evening.
Harmony Lodge, No. 2, I. O. O. F.; meets each Monday evening in Odd Fellows' Building, Fort street.
Pacific Degree Lodge, No. 1, Daughters of Rebekah; meets in Odd Fellows' Building, Fort street, second and fourth Thursdays of each month.
Olive Branch Rebekah, No. 2, I. O. O. F.; meets first and third Thursdays each month in Odd Fellows' Building.
Polynesian Encampment, No. 1, I. O. O. F.; meets in Odd Fellows' Building, Fort street, first and third Fridays of each month.
Canton Oahu, No. 1, P. M., I. O. O. F.; meets second Friday each month in Odd Fellows' Hall, Fort St.
Oahu Lodge, No. 1, K. of P.; meets every Friday evening at Pythian Hall, corner Beretania and Fort streets.
Mystic Lodge, No. 2, K. of P.; meets every second and fourth Tuesday evening at Pythian Hall, cor. Beretania and Fort streets.

Section N. 225—Endowment Rank, K. of P.; meets on the second Saturday of January, July and December in Pythian Hall, Honolulu Temple, No. 1, Rathbone Sisters; meets in Pythian Hall, first and third Tuesday evenings of each month.

Wm. McKinley Lodge, No. 8, K. of P.; meets first and third Tuesday evenings in Pythian Hall.

Hawaiian Tribe, No. 1, Improved Order of Red Men; meets on first and third Thursdays of each month at Odd Fellows' Hall.

Court Lunalilo No. 6600, A. O. of Foresters; meets at K. of P. Hall on first and third Wednesdays of each month.

Court Camoes No. 8110, A. O. F.; meets second and fourth Tuesday evening of month in San Antonio Hall.

Geo. W. de Long Post, No. 45, G. A. R.; meets the second Tuesday of each month at Odd Fellows' Building, Fort street.

Theo. Roosevelt Camp, No. 1, Dept. of Hawaii U. S. W. V.; first and third Saturdays, in their hall.

Geo. C. Wiltse Camp, Sons of Veterans; meets on third Tuesday of each month in San Antonio Hall.

Capt. Cook Lodge, No. 353, Order Sons of St. George; meets at Pythian Hall every Thursday evening.

Court Hawaii, No. 3769, Independent Order of Foresters, meets third Monday of each month.

Damen Council, Young Men's Institute; meets second and fourth Wednesdays of each month at Catholic Mission Hall.

Honolulu Lodge, B. P. O. Elks, 616; meets every Friday evening in the Elks' Building, King street near Fort.

Honolulu Aerie, No. 140, Fraternal Order of Eagles, meets second and fourth Wednesdays each month in K. of P. Hall.

Honolulu Lodge, L. O. O. M., No. 800, meets weekly in Progress Block, Friday evenings.

American Association of Masters and Pilots of Steam Vessels, Honolulu Harbor, No. 54; meets first Sunday of each month at 7 p. m. in Odd Fellows' Hall.

Marine Engineers' Beneficial Association, No. 100; meets every second and fourth Monday nights at K. of P. Hall.

Kamehameha Lodge (native); meets last Thursday of each month in Odd Fellows' Hall.

Kauikeaouli Lodge, No. 1 (native); meets on first and third Fridays each month in St. Antonio Hall.

PLACES OF WORSHIP.

Central Union Church, Congregational (Independent), corner Beretania and Richards streets; Rev. Doremus Scudder, D. D., pastor; Rev. A. A. Ebersole, assistant pastor. Services every Sunday at 11 a. m. and 7:30 p. m. Sunday school meets one hour before morning service. Prayer meeting Wednesday evenings at 7:30.

Palama Chapel, Rev. H. W. Chamberlain. Sunday school at 9:30 a. m. Gospel services at 7:30 p. m.

Methodist Episcopal Church, corner Beretania and Miller streets. Rev. Robt. Elmer Smith, pastor. Sunday services 11 a. m. and 7:30 p. m. Sunday school meets at 10 a. m. Prayer meeting Wednesdays at 7:30 p. m.

The Christian Church, David Carey Peters, pastor. Sunday services at 11 a. m. and 7:30 p. m. at their house of worship, Alakea street near King. Sunday school meets at 9:45 a. m. Prayer meeting Wednesday evenings, at 7:30.

Salvation Army, services held nightly at hall, Nuuanu street, with Sunday services at the usual hour.

Roman Catholic Church, Fort street, near Beretania; Rt. Rev. Libert Boeynaems, Bishop of Zeugma. Services every Sunday at 10 a. m. and 4:30 p. m. Low mass every day at 6 and 7 a. m. High mass Sundays and Saints' days at 10 a. m.

St. Andrew's Cathedral, Protestant Episcopal; entrance from Emma street, near Beretania. Rt. Rev. Henry Bond Restarick, Bishop of the Missionary District of Honolulu; Rev. Wm. Ault, Vicar. Holy Communion, 7; Sunday school, 10; morning prayer, litany and sermon, 11; Hawaiian service, 3:30; evening prayer and sermon, 7:30.

Chinese Congregation. Rev. Kong Yim Tet, Curate. Services on Sunday at 11 a. m. and 7:30 p. m. Evening prayer every Wednesday at 7 p. m.

St. Clement's Chapel, Punahou. Services on Sundays. Holy Communion, 7 a. m. Morning prayer, 11 a. m.; evening prayer, 7:30 p. m. Rev. John Osborne, rector.

First Church of Christ, Scientist, Fraternity Hall, Odd Fellows' building. Sunday services 11 a. m.

Christian Chinese Church, Fort street; Rev. Tse Kei Yuen, acting pastor. Services every Sunday at 10:30 a. m. and 7:30 p. m. Prayer meeting Wednesdays at 7:30 p. m.

German Lutheran Church, Beretania St.; Rev. E. Engelhardt, pastor. Services on Sunday at 11 a. m.; Sunday school at 10 a. m.

Portuguese (Protestant) Mission; Rev. A. V. Soares, pastor. Services every Sabbath at the usual hour. Sunday school at 3 p. m. Chapel situated corner of Punchbowl and Miller streets.

Reorganized Church of Jesus Christ, G. J. Waller, pastor. Services in new chapel on King street near Thomas Square; Sunday school at 10 a. m.; preaching in Hawaiian at 11 a. m.; in English at 7:30 p. m.

Seventh Day Adventists. Rev. Mr. Conway, pastor. Chapel 767 Kinau street. Sabbath school Saturdays at 10 a. m.; preaching at 11. Wednesday prayer and missionary meeting at 7:30 p. m.

Japanese Union Church (connected with Hawaiian Board Missions); Rev. T. Hori, pastor. Hold services at 10 a. m. Preaching at 11 a. m. and 7:30 p. m. Sunday services. Prayer and praise meeting Wednesdays at 7 p. m.

Japanese Methodist Church, Rev. C. Nakamura, pastor. Hold services in chapel on River street, near St. Louis College.

Japanese Church, cor. Kinau and Pensacola Sts., Rev. T. Okumura, pastor; hold regular services at the usual hours.

Bishop Memorial Chapel, Kamehameha Schools. Rev. J. L. Hopwood, Chaplain. Morning services at 11.

COUNTY OFFICIALS.

CITY AND COUNTY OF HONOLULU.

Mayor Joseph J. Fern
 Sheriff Wm. P. Jarrett
 Clerk D. Kalauokalani, Jr.
 Auditor Jas. Bicknell
 Treasurer C. J. McCarthy
 City and County Attorney John W. Cathcart
 Supervisors—A. E. Cox, Saml. Hardesty, John
 Markham, Wm. H. McClellan, M. C. Pa-
 checo, Lester Petrie, E. H. F. Wolter.
 Deputy Sheriffs—Honolulu, Chas. H. Rose.
 Koolauloa, J. K. Luahiwa.
 Koolaupoko, R. W. Davis.
 Waianae, J. K. Kupau.
 Waialua, Oscar P. Cox.
 Ewa, Jno. Fernandez.
 Road Supervisor—Thos. F. Kennedy.
 Supt. Garbage Dept.—Saml. Lehua.
 Civil Engineer—L. M. Whitehouse.
 Chief Engineer Road Dept.—C. W. North.
 Chief Engineer Fire Dept.—Chas. H. Thurs-
 ton.
 Asst. Engineer Fire Dept.—Wm. Blaisdell.
 Supt. Electric Light Dept. and Police and Fire
 Alarm System—W. L. Frazee.
 Deputy County Attorney—P. L. Weaver.
 Prosecuting Attorney, Police Court—A. M.
 Brown.
 Bandmaster Hawaiian Band—Capt. Henry
 Berger.
 Supt. Kapiolani Park—B. G. Rivenburg.

CIVIL SERVICE COMMISSION.

A. J. Wirtz Chairman
 Jno. F. Doyle, D. M. Kupihea.

COUNTY OF MAUI.

Sheriff Clement Crowell
 Attorney Daniel H. Case

Auditor Charles Wilcox
 Treasurer L. M. Baldwin
 Clerk W. F. Kaee
 Supervisors—Wailuku, Chas. Lake.
 Lahaina, Wm. Henning.
 Makawao, S. E. Kalama.
 Hana, R. A. Drummond.
 Molokai, T. T. Meyer.

COUNTY OF HAWAII.

Sheriff Samuel K. Pua
 Auditor Geo. L. Desha
 Clerk Jno. K. Kai
 Attorney W. H. Beers
 Treasurer Chas. Swain
 Supervisors—Kau, S. Kauhane.
 Kona, J. R. Yates.
 Kohala, E. K. Kaihailua.
 Hilo, D. K. Ewaliko, Jno. Ke-
 aloha.
 Puna, N. K. Lyman.
 Hamakua, Joseph Prichard.

COUNTY OF KAUAI.

Sheriff W. H. Rice, Jr.
 Auditor S. Maser
 Clerk J. M. Kaneakua
 Attorney S. K. Kaeo
 Treasurer H. Morgan
 Supervisors—Waimea, Francis Gay.
 Koloa, W. D. McBryde.
 Lihue, H. D. Wishard.
 Kawaihau, J. V. Ekekela.
 Hanalei, A. Menefoglio.

FEDERAL OFFICIALS.

DEPARTMENT OF JUSTICE.

U. S. DISTRICT COURT.

Hon. Sanford B. Dole Judges U. S. Dis-
 Hon. C. F. Clemons trict Court.
 Jeff. McCarn U. S. Attorney
 C. C. Bitting Asst. U. S. Attorney
 E. R. Hendry U. S. Marshal
 H. H. Holt Chief Office Deputy U. S. Marshal
 D. K. Sherwood Office Deputy, U. S. Marshal
 A. E. Murphy Clerk
 F. L. Davis, Wm. Rosa Deputy Clerks
 H. G. Spencer, Chas. S. Davis
 Geo. S. Curry U. S. Commissioners
 L. Severence Referee in Bankruptcy
 Wm. H. Beers U. S. Commissioner, Hilo
 Regular Terms:—At Honolulu on the second
 Monday in April and October.
 Special Terms:—May be held at such times
 and places in the district as the Judge
 may deem expedient.

Miss C. F. Sackett, Miss E. Pratt
 Clerks U. S. Attorney
 O. P. Soares U. S. Court Reporter
 Miss Goldie G. Gurney Secretary to U. S.
 District Judges.
 U. S. Jury Commissioners—R. H. Trent, A. E.
 Murphy.

TREASURY DEPARTMENT.

CUSTOMS DIVISION.

E. R. Stackable Collector
 R. C. Stackable Special Deputy Collector
 Raymer Sharp Chief Examiner
 A. B. Ingalls Examiner and Gauger
 John W. Short Chief Liquidating Clerk
 J. K. Brown Dep. Col. and Cashier
 F. L. Beringer, R. H. Bemrose, E. H.
 Boyen, C. J. Cooper, Mark Weil
 Examiners

J. B. Gibson, P. M. Naluai, M. J. Scanlan, W. H. D. King, W. D. Wilder.....Deputy Collectors and Clerks
 E. E. Miller, M. G. Johnston, Geo. W. Lucas, Joseph Ordenstein, R. K. Brown, E. S. McGrew.....Clerks
 E. D. Ferreira.....Stenographer and Typewriter
 James I. Arcia.....Weigher
 R. J. Taylor.....Deputy Collector and Inspector
 R. Fridersdorff.....Sampler and Verifier
 E. A. K. Williams.....Assistant Gauger
 James K. Kalama.....Foreman
 A. P. Reis.....Messenger
 Jas. Dodd, C. M. Neal, L. B. Reeves, G. H. Paul, W. H. Stroud, C. F. G. Rowold, G. McNicoll, J. K. Cockett, F. M. McGrew, W. C. McCoy, F. J. Robello.....Day Inspectors
 Helen Sprinks.....Inspector
 C. E. Carter, John Hodson, B. J. Wright, B. H. Atwood, A. E. Mitchell, H. M. Gregg, J. W. Edwards, M. R. Medeiros, W. A. Cottrell, T. P. Harris, J. K. Bunker, J. Oliveira, S. R. L. Short, M. J. Scully.....Night Inspectors
 D. C. Lindsay.....Deputy Collector, Kahului
 B. K. Baird.....Deputy Collector, Hilo
 E. Madden.....Deputy Collector, Mahukona
 W. D. McBryde.....Deputy Collector, Koloa

INTERNAL REVENUE OFFICE.

Chas. A. O'Grill.....Collector Internal Revenue
 Ralph S. Johnstone.....Chief Deputy Collector
 E. K. Kekuewa.....Deputy Collector
 O. A. Baird.....Division Deputy
 B. F. Heilbron.....Gauger
 Lee Sing.....Stamp Deputy and Cashier
 S. G. Noda.....Messenger

POSTOFFICE DEPARTMENT.

Frank J. Hare.....Inspector in Charge
 Geo. W. Carr.....Asst. Supt. Railway Mail Service
 Jos. G. Pratt.....Postmaster
 Jos. Kubey.....Asst. Postmaster
 J. P. Mellin.....Supt. of Mails
 N. K. Hoopii.....Chief Registry Clerk
 W. C. Peterson.....Chief Money Order Clerk
 J. Nohokaiu.....Chief Mailing Clerk

DEPARTMENT OF COMMERCE AND LABOR.

IMMIGRATION SERVICE.

R. L. Halsey.....Inspector in Charge
 H. B. Brown, Edwin Farmer, M. J. Moore.....Inspectors
 Tomizo Katsunuma, C. Tajima.....Japanese Interpreters
 Tong Kau.....Chinese Interpreter
 Moses Kauwe, Louis Caesar, S. Lukua, Manl. Spencer, Robt. Plunkett, Watchmen
 M. S. Spalding, J. L. Milligan.....Clerks

DEPARTMENT OF AGRICULTURE.

Hawaii Experiment Station.

Dr. E. V. Wilcox.....Special Agent in Charge
 W. P. Kelley.....Chemist
 Miss A. R. Thompson.....Asst. Chemist
 Wm. T. McGeorge.....Asst. Chemist
 J. E. Higgins.....Horticulturist

C. J. Hunn, V. Holt.....Asst. Horticulturists
 D. F. Fullaway.....Entomologist
 C. K. McClelland.....Agronomist

U. S. GEOLOGICAL SURVEY.

Water Resources Branch.

Offices at Rooms 17-18-19-20 Kapiolani Bldg., Honolulu.

G. K. Larrison.....District Engineer
 J. C. Dort.....Office Engineer
 E. E. Goo.....Clerk
 Kauai.

W. V. Hardy—Assistant Engineer in Charge, Waimea.

Maui and Molokai.

C. T. Bailey—Assistant Engineer in Charge, Wailuku.

Hawaii.

E. O. Christiansen—Assistant Engineer in Charge, Hilo.

Howard Kimble—Assistant Engineer, at large.

Topographic Branch.

A. T. Fowler—Topographer in Charge, Hilo.

U. S. WEATHER BUREAU.

Wm. B. Stockman.....Section Director
 C. D. Asher.....Assistant

WAR DEPARTMENT.

U. S. ARMY.

Engineer Department.

Major W. P. Wooton, Corps of Engineers, U. S. Army, in charge of works for defense of Honolulu and Pearl Harbor, and of the Improvement of Honolulu, Hilo and First Lt. F. S. Besson, Corps of Engrs., Asst. to Dist. Engr. Officer.

S. F. Burbank }
 Richard Quinn } Assistant Engineers.

Geo. F. Whittemore, N. H. Duval, Junior Engineers.

A. K. Shepard, Chief Clerk.
 F. M. Bechtel, L. H. Camp, Miss Edna Perkins, Clerks.

A. V. Hayes, Receiver of Materials.
 Geo. M. Fraser, Storekeeper.
 S. H. Ware, Superintendent.

Engineer Camp at Fort Shafter.

Major W. P. Wooton, Corps of Engineers, Commanding

Capt. W. T. Hannum, Corps of Engineers, U. S. A.

First Lieut. C. C. Gee, Corps of Engineers, U. S. A.

First Lieut. J. R. D. Matheson, Corps of Engineers, U. S. A.

First Lieut. A. K. B. Lyman, Corps of Engineers, U. S. A.

NAVY DEPARTMENT.

U. S. Naval Station, Hawaii.

Rear Admiral C. B. T. Moore, U. S. N., Commandant.

Lieut. J. G. Ellis Lando, U. S. N., Aide to Comdnt. and Captain of Yard.

Asst. Surgeon W. M. Ker, U. S. N., Senior Medical Officer.

Paymaster W. B. Izard, U. S. N., Pay Officer
and General Storekeeper.
Civil Engineer S. Gordon, U. S. N.
Civil Engineer P. J. Bean, U. S. N.
Civil Engineer Gordon Church, U. S. N.
Chief Boatswain H. J. Duffy, U. S. N.
Chief Boatswain F. W. Metters, U. S. N.
Chief Gunner C. B. Babson, U. S. N., Com-
manding Officer U. S. S. *Navajo*.
Pay Clerk G. G. Schweitzer, C. S. N.
Pay Clerk T. Dunn, U. S. N.

LIGHT-HOUSE ESTABLISHMENT.

Arthur E. Arledge, Inspector of the 19th Light-
house District, in charge of all light-house
affairs in the Hawaiian Islands.
Frank C. Palmer.....Superintendent
Fredk. A. Edgecomb.....Asst. Superintendent
Ernest L. Wilson.....Chief Clerk
M. W. Mikkelson.....Clerk
Emil C. Legros, Keeper, Light-House Depot.

Light-House Tender Kukui.

F. T. Warriner, Captain.
Henry Blackstone, First Officer.
Axtel F. Hammer, Second Officer.
J. G. Startup, Chief Engineer.
Henry C. Binder, First Assistant Engineer.

PUBLIC HEALTH, UNITED STATES SERVICE.

F. E. Trotter, P. A. Surgeon U. S. P. H. S.,
Chief Quarantine Officer.
Edward R. Marshall, P. A. Surgeon U. S. P. H. S.
F. Carl Keller, Surgeon U. S. P. H. S.
A. N. Sinclair, Acting Assistant Surgeon
U. S. P. H. S.
W. F. James, Acting Asst. Surgeon U. S. P. H. S.
Frank A. Stump, Pharmacist U. S. P. H. S.
Emma F. Smith, Medical Inspectress U. S. P. H. S.
L. L. Sexton, Acting Assistant Surgeon
U. S. P. H. S., Hilo, Hawaii, T. H.
Wm. Osmer, Acting Assistant Surgeon U. S.
P. H. S., Kahului, Maui, T. H.
Franklin Burt, Acting Assistant Surgeon U. S.
P. H. S., Lahaina, Maui, T. H.
A. H. Waterhouse, Acting Assistant Surgeon
U. S. P. H. S., Koloa, Kauai, T. H.
C. M. Fauntleroy, P. A. Acting Assistant
Surgeon U. S. P. H. S., Makaweli, Kauai,
T. H.
B. D. Bond, Acting Assistant Surgeon U. S.
P. H. S., Mahukona, Hawaii, T. H.

LEPROSY INVESTIGATION STATION, MOLOKAI.

Geo. M. McCoy, P. A. Surgeon.....Director
Dr. Moses T. Clegg.....Asst. Director
H. T. Hollmann.....Asst. Surgeon

WAR DEPARTMENT, U. S. ARMY.

Hawaiian Department.

(From latest official Roster.)

Headquarters: Honolulu, Alexander Young Building.

Commander: Brigadier General FREDERICK FUNSTON, U. S. Army.

Aide-de-camp: 1st Lieut. WILLIAM G. BALL, 2d Infantry.

Department Staff.

Chief of Staff: Major ARTHUR S. CONKLIN, General Staff.
Department Adjutant: Lieut. Col. ARCHIBALD CAMPBELL, Adjutant General's De-
partment.
Department Inspector: Colonel JACOB G. GALBRAITH, Cavalry, Acting Inspector
General.
Department Judge Advocate: Captain EDWARD K. MASSEE, Acting Judge Advocate.
Department Quartermaster: Major B. FRANK CHEATHAM, Quartermaster Corps.
Department Surgeon: Colonel DANIEL M. APPEL, Medical Corps.
Department Engineer: Major WILLIAM P. WOOTEN, Corps of Engineers.
Department Ordnance Officer: Captain BIRCH O. MAHAFFEY, Ordnance Department.
Department Signal Officer: Captain GEORGE S. GIBBS, Signal Corps.
Department Sanitary Inspector: Lieut. Col. FREDERICK P. REYNOLDS, Medical
Corps.
Officer in Charge of Militia Affairs: 1st Lieut. ARTHUR L. BUMP, 25th Infantry.
Inspector of Small Arms Practice: 1st Lieut. WILLIAM G. BALL, 2d Inf., A.D.C.

Additional Staff.

Major DAVID B. CASE, Quartermaster Corps, Assistant to Department Quartermaster.
Captain CHALMERS G. HALL, Quartermaster Corps, Assistant to Department Quar-
termaster.
Captain GEORGE D. FREEMAN, JR., Quartermaster Corps, Assistant to Department
Quartermaster.

Captain RALPH B. LISTER, Quartermaster Corps, Assistant to Department Quartermaster.
 Captain WILLIAM R. DAVIS, Medical Corps, Medical Supply Officer and Attending Surgeon.
 1st Lieut. FRANK S. BESSON, Corps of Engineers, Assistant to Department Engineer.

FIRST HAWAIIAN BRIGADE. (1st, 2d and 25th Regiments of Infantry).

Commander: Brigadier General MONTGOMERY M. MACOMB, U. S. Army.

Personal Staff.

Aide-de-camp: 2d Lieut. CARY I. CROCKETT, 2d Infantry.
 Aide-de-camp: 2d Lieut. BERNARD R. PEYTON, 1st Field Artillery, D. S., Mtd. Service School, Ft. Riley, Kans.

Brigade Staff.

Brigade Adjutant: Major JULIUS A. PENN, 1st Infantry.

DEPARTMENT HOSPITAL.

Medical Corps.

Lieut. Col. Frederick P. Reynolds, Commanding Hospital, Dept. Sanitary Inspector.
 Captain Leartus J. Owen, Assistant to Commanding Officer.
 Captain Larry B. McAfee, on leave, 2 Mos., Sept. 6, 1913.
 Captain Adam E. Schlanser, Assistant to Commanding Officer.
 Captain Charles C. Demmer, Assistant to Commanding Officer.
 1st Lieut. Jay D. Whitham, Assistant to Commanding Officer.

Dental Corps.

Acting Dental Surgeon Arnett P. Matthews.
 Acting Dental Surgeon Charles E. Sherwood.

COAST DEFENSES OF OAHU.

Headquarters: Fort Ruger, H. T. (Phone 3401.)
 Posts: Forts Armstrong, De Russy, Kamehameha and Ruger, H. T.
 Commander: Colonel WILLIAM C. RAFFERTY, Coast Artillery Corps.
 Adjutant: Captain FRANCIS M. HINKLE, Coast Artillery Corps.
 Quartermaster: Captain GEORGE L. HICKS, JR., Coast Artillery Corps.
 Artillery Engineer: Captain JOHN S. JOHNSTON, Coast Artillery Corps.
 Ordnance Officer: Captain FREDERICK W. PHISTERER, Coast Artillery Corps.

MINE PLANTER, "MAJOR SAMUEL RINGGOLD."

Station: Honolulu, H. T.
 1st Lieut. HENNING F. COLLEY, Coast Artillery Corps, Commanding Vessel.

FORT ARMSTRONG, H. T.

104th Company, Captain Henry J. Hatch, Commanding Company, Executive.
 C. A. C. 1st Lieut. John S. Pratt, Asst. to Q. M., Ord. Off., Arty. Engr., Fire Marshal.
 1st Lieut. John Mather, duty with company, Sum. Court Off.
 2d Lieut. Daniel N. Swan, Jr., duty with company, Post Exchange Officer and Librarian.
 Medical Corps. Captain William R. Davis, Med. Corps, Post Surgeon.

FORT DE RUSSY, H. T.

- 10th Company, Captain Norris Stayton, Commanding Company, Executive, Fire Marshal.
C. A. C.
1st Lieut. Rollin L. Tilton, duty with company, Asst. to Q. M., Post Exchange and Sum. Court Off.
2d Lieut. Edwin J. O'Hara, duty with company, Asst. to Ord. Off. and Arty. Engr., Athletic Officer and Librarian.
- Medical Corps. 1st Lieut. Bert R. Huntington, Post Surgeon, Recruiting Officer, Forts De Russy and Armstrong.

FORT KAMEHAMEHA, H. T.

- Coast Artillery Major Frank W. Coe, Executive.
Corps. 1st Lieut. Harold Geiger, Aviation duty, Commanding Aviation Detachment.
- 68th Company, Captain George A. Taylor, Commanding Company, Exchange Officer.
C. A. C. 2d Lieut. Hermann H. Zornig, duty with company.
2d Lieut. Charles R. Baxter, duty with company, Asst. to C. D. Q. M., Police Officer.
- 75th Company, Captain Clifford Jones, Commanding Company, Sum. Court Off.
C. A. C. 1st Lieut. Edward L. Kelly, duty with company, Asst. to Ord. Off. and Arty. Engr., Librarian.
2d Lieut. Herbert E. Ellis, duty with company, in charge of instrn. in signalling.
- 143d Company, Captain Charles D. Winn, sick in qtrs.
C. A. C. 2d Lieut. Coleman W. Jenkins, Commanding Company.
- Medical Corps. 1st Lieut. Robert C. McDonald, Post Surgeon, Recruiting Officer.

FORT RUGER, H. T.

- Coast Artillery Major Edward J. Timberlake, Executive.
Corps. Captain George L. Hicks, Jr., Police and Prison Officer.
- 55th Company, 1st Lieut. Carr W. Waller, Commanding Company.
C. A. C. 1st Lieut. George L. Van Deusen, duty with company.
2d Lieut. Harold F. Nichols, duty with company.
- 105th Company, Captain Charles A. Clark, Commanding Company, Post Exchange Officer and Librarian.
C. A. C. 1st Lieut. Frank D. Applin, duty with company, Athletic Officer.
2d Lieut. George F. Humbert, duty with company, Off. in charge of post schools and range officer.
- 159th Company, Captain Edward Carpenter, Commanding Company, Fire Marshal,
C. A. C. Sum. Ct. Off.
1st Lieut. Robert E. Guthrie, duty with company.
- Med. Res. Corps. 1st Lieut. Charles L. Baker, Post Surgeon, Recruiting Officer.

FORT SHAFER, H. T.

- Headquarters, Colonel Francis H. French, Commanding Regiment and Post.
2d Infantry. Lieut. Col. Benjamin W. Atkinson, sick leave, 1 Mo., Sept. 30, 1913.
Major Ernest V. Smith, Commanding 1st Battalion.
Major Michael J. Lenihan, Commanding 2d Battalion.
Major Herbert O. Williams, Commanding 3d Battalion, Fire Marshal, Sum. Ct. Off.
Chaplain William R. Scott (Capt.), en route to join.
Captain Peter E. Marquart, Comsy., leave 3 Mos., Oct. 5, 1913.
Captain William R. Gibson, Adjutant, Comdg. N. C. S., Band and Casuals.
1st Lieut. Laurence O. Mathews, Adjt., 2d Battalion, Comdg. Regtl. Detch.
1st Lieut. Homer N. Preston, Adjt., 3d Batt., Engr. and Sig. Off.
1st Lieut. Clement H. Wright, Adjt., 1st Batt., in U. S., leave 2 Mos., Aug. 22, 1913.
2d Lieut. Cary I. Crockett, Q.M.&C., 1st Batt., D.S., A.D.C. to Brig. Gen. M. M. Macomb.
2d Lieut. Frederick A. Barker, Q.M.&C., 3d Batt., Post Q.M.

Company A.	Captain Eleutheros H. Cooke, Commanding Company. 1st Lieut. Ira Longanecker, duty with company. 2d Lieut. Lindsay McD. Silvester, duty with company.
Company B.	Captain Robert McCleave, Commanding Company, Asst. to Fire Marshal. 1st Lieut. Joseph A. McAndrew, D.S., Army Signal School. 2d Lieut. Adrian K. Polhemus, duty with company.
Company C.	Captain Walter H. Johnson, Commanding Company. 1st Lieut. Herndon Sharp, duty with company, Ord. Off., Range Off. and Librarian. 2d Lieut. John P. Edgerly, D.S., Aviation School, San Diego, Calif.
Company D.	Captain De Witt W. Chamberlin, Commanding Company. 1st Lieut. Franklin P. Jackson, S.D. as Exchange Officer. 2d Lieut. Charles B. Lyman, duty with company.
Company E.	Captain Charles S. Lincoln, Commanding Company. 1st Lieut. William G. Ball, D.S., A.D.C. to Gen. Funston. 2d Lieut. William C. Rose, duty with company.
Company F.	Captain Archie J. Harris, Commanding Company. 1st Lieut. Vernon W. Boller, in U. S., leave 2 Mos., Aug. 21, 1913. 2d Lieut. Edward L. Hoffman, duty with company.
Company G.	Captain James E. Bell, Commanding Company. 1st Lieut. 2d Lieut. George M. Halloran, duty with company.
Company H.	Captain Edward A. Shuttleworth, D.S., Inspector-Instructor, Militia, Hartford, Conn. 1st Lieut. Alfred J. Booth, duty with company. 2d Lieut. Sidney H. Foster, in U. S., leave 3 Mos., Aug. 13, 1913.
Company I.	Captain Otho B. Rosenbaum, Commanding Company. 1st Lieut. Fred A. Cook, duty with company. 2d Lieut. Douglas T. Greene, duty with company.
Company K.	Captain Paul B. Malone, Commanding Company. 1st Lieut. Nicholas W. Campanole, duty with company. 2d Lieut. Carl A. Hardigg, duty with company.
Company L.	Captain George H. Jamerson, Commanding Company. 2d Lieut. Thomas J. Camp, duty with company.
Company M.	Captain Benjamin H. Watkins, Commanding Company. 1st Lieut. Joseph C. Kay, duty with company. 2d Lieut. Robert G. Calder, duty with company.
Unassigned.	Captain Jesse M. Cullison, D.S., Army School of the Line. 1st Lieut. Lloyd R. Fredendall, D.S., Army Signal School. 2d Lieut. William A. Reed, leave 3 Mos., Aug. 6, 1913.
Medical Corps.	1st Lieut. Leo. C. Mudd, Post Surgeon and Recruiting Officer.
Company I, 3d Battalion, Engineers.	Captain Warren T. Hannum, Commanding Company, Engr. Exchange Officer. 1st Lieut. Cleveland C. Gee, duty with company. 1st Lieut. John R. D. Matheson, duty with company.
Field Company E, Signal Corps.	Captain George S. Gibbs, Commanding Company. 1st Lieut. Robert R. Love, duty with company.
Detch., Tele- graph Co. H, Signal Corps. Attached.	1st Lieut. Frederick F. Black, Commanding Detachment. Captain Philip J. Lauber, Inftry., Unsgd.

SCHOFIELD BARRACKS.

Col. Lyman W. V. Kennon, 25th Inf., Comndg.

- Headquarters, 1st Infantry. Colonel George K. McGunnegle, leave 3 Mos., Sept. 13, 1913.
 Lieut. Col. Robert L. Hirst, Commanding Regiment.
 Major Julius A. Penn, D.S., Adj., 1st Hawaiian Brigade.
 Major Charles E. Tayman, Commanding 1st Battn., Regtl. S.C.O.
 Major Joseph Frazier, Commanding 3d Battalion.
 Chaplain William A. Aiken, (1st Lt.), duty with regiment.
 Captain Frank C. Burnett, Adj., leave 2 Mos., Sept. 6, 1913.
 Captain Robert S. Offley, Q.M., Post Q.M.
 Captain Henry M. Fales, Comsy., Post Police Officer, Regtl. Prison Off.
 1st Lieut. John M. True, Battn. Adj., 1st Battn.
 1st Lieut. Harry S. Malone, Adj. 3d Battn., Exchange Officer.
 2d Lieut. Franklin L. Whitley, B.Q.M.&C., 1st Battn., leave 2 Mos., Oct. 6, 1913.
 2d Lieut. Manton C. Mitchell, B.Q.M.&C., 2d Battn.
- Company A. Captain John L. Jordan, Commanding Company.
 1st Lieut. Staley A. Campbell, duty with company.
 2d Lieut. Charles S. Little, duty with company, Asst. to Regtl. Sig. Off.
- Company B. Captain Herschel Tupes, Commanding Company.
 2d Lieut. Eugene W. Fales, duty with company.
- Company C. Captain Brady G. Ruttencutter, D.S., Army School of the Line.
 1st Lieut. Gouverneur V. Packer, Commanding Company.
 2d Lieut. Otis K. Sadtler, duty with company.
- Company D. Captain G. De Grasse Catlin, Abs. sick, Walter Reed Gen. Hosp.
 1st Lieut. Kneeland S. Snow, Commanding Company.
 2d Lieut. Charles M. Everitt, duty with company.
- Company E. Captain John R. Thomas, Jr., Commanding Company.
 1st Lieut. Joseph L. Topham, Jr., leave 2 Mos. and 28 days, July 4, 1913.
 2d Lieut. William A. McCulluch, duty with company.
- Company F. Captain William Newman, Commanding Company and 2d Battn.
 1st Lieut. Irving J. Phillipson, leave 2 Mos., Aug. 21, 1913.
 2d Lieut. Haig Shekerjian, duty with company.
- Company G. Captain Campbell King, Commanding Company.
 1st Lieut. Leo I. Samuelson, Leave 2 Mos., Aug. 13, 1913.
 2d Lieut. Thomas C. Spencer, duty with company.
- Company H. Captain Grosvenor L. Townsend, leave 2 Mos., Sept. 6, 1913.
 1st Lieut.
 2d Lieut. Seth W. Scofield, duty with company.
- Company I. Captain Edward C. Carey, Commanding Company.
 1st Lieut. Luther R. James, duty with company.
 2d Lieut. Jesse A. Ladd, leave 2 Mos., Sept. 6, 1913.
- Company K. Captain Joseph F. Janda, Commanding Company.
 1st Lieut. George W. Harris, duty with company.
 2d Lieut. Virgil V. Enyart, duty with company.
- Company L. Captain Carl A. Martin, Commanding Company.
 1st Lieut. Walter E. Pridgen, D.S., Army Signal School.
 2d Lieut. John H. Hinemon, Jr., duty with company.
- Company M. Captain Harry E. Knight, Commanding Company.
 1st Lieut. Harry A. Wells, S.D. with Co. H.
 2d Lieut. Walter M. Robertson, duty with company.
- Unassigned. 1st Lieut. James A. Ulio, Actg. Regtl. and Post Adj.
 1st Lieut. Elmer F. Rice, D.S., West Point Military Academy.
 2d Lieut. Robert Sears, D.S., School of Musketry.

Headquarters, 4th Cavalry.	Colonel William D. Beach, Commanding Regiment. Lieut. Col. John B. McDonald, duty with regiment. Major Letcher Hardeman, Commanding 1st Squadron. Major Guy H. Preston, Commanding 2d Squadron, Sum. Court Officer. Major Ralph Harrison, Commanding 3d Squadron. Chaplain Simon M. Lutz, (Capt.), duty with regiment, in charge of Post School, Post Librarian. Captain John O'Shea, Adjutant, Cmdg. N. C. S. & Band. Captain Sherrard Coleman, Comsy., Actg. Regtl. Q. M., Exchange Off. 2d Lieut. Robert M. Cheney, S.Q.M. & C., Regtl. Police and Prison Officer, Asst. to Post Q.M.
Troop A.	Captain Louis C. Scherer, Commanding Troop. 1st Lieut. Jens E. Stedje, duty with troop. 2d Lieut. Alexander L. P. Johnson, duty with troop.
Troop B.	Captain James S. Parker, Commanding Troop. 1st Lieut. Clarence K. Lyman, duty with troop, Athletic Officer. 2d Lieut. Ernest G. Cullum, duty with troop.
Troop C.	Captain Lucius R. Holbrook, Commanding Troop. 1st Lieut. William C. Gardenhire, duty with troop, Range Off. 2d Lieut. Robert S. Donaldson, duty with troop.
Troop D.	Captain William D. Chitty, Commanding Troop. 1st Lieut. Rawson Warren, duty with troop. 2d Lieut.
Troop E.	Captain Walter C. Short, Commanding Troop. 1st Lieut. Joseph C. Righter, Jr., duty with troop. 2d Lieut. William Nalle, duty with troop.
Troop F.	Captain Douglas McCaskey, Commanding Troop. 1st Lieut. Orville N. Tyler, duty with troop. 2d Lieut. Philip J. Kieffer, S.D. with Troop H.
Troop G.	Captain John S. Fair, Commanding Troop. 1st Lieut. Charles J. Naylor, D.S., G.R.S., Oklahoma City, Okla. 2d Lieut. Harrison H. C. Richards, duty with troop.
Troop H.	Captain Edwin B. Winans, Commanding Troop. 1st Lieut. Williams S. Martin, D.S., Saumur, France. 2d Lieut. Harry A. Flint, duty with troop.
Troop I.	Captain Christian Briand, Commanding Troop. 2d Lieut. Roland L. Gaugler, duty with troop.
Troop K.	Captain James E. Fechet, Commanding Troop. 1st Lieut. Alexander M. Milton, duty with troop. 2d Lieut. Robert C. Rodgers, S.D., Asst. to Q.M.
Troop L.	Captain Julian A. Benjamin, Commanding Troop. 1st Lieut. William B. Renziehausen, duty with troop. 2d Lieut. William E. Dorman, duty with troop.
Troop M.	Captain Varien D. Dixon, Commanding Troop. 1st Lieut. Sebring C. Megill, duty with troop. 2d Lieut. Henry W. Hall, duty with troop.
Unassigned.	Captain Gordon N. Kimball, D.S., Army Service Schools. 1st Lieut. Leonard W. Prunty, D.S., Mtd. Service School. 1st Lieut. Charles Burnett, D.S., Tokyo, Japan. 1st Lieut. Seth W. Cook, Comdg. Machine Gun Platoon. 2d Lieut. Augustin G. Rudd, sick, Ft. Bayard, N. M.
Veterinarians.	Vet. Sgn. Alfred L. Mason, duty with regiment. Vet. Sgn. Ralph M. Buffington, duty with regiment.

- Headquarters,
1st Field
Artillery. Colonel Samuel D. Sturges, Commanding Regiment.
Lieut. Col. Charles T. Menoher, D.S., School of Fire.
Major William Cruikshank, Commanding 2d Battalion.
Major Dwight E. Aultman, Commanding 1st Battalion.
Chaplain Samuel H. Bell, duty with regiment.
Captain Harry C. Williams, Adjutant.
Captain Roger O. Mason, Q.M., S.D., Asst. to Post Q.M.
Captain George M. Apple, Comsy., Asst. to Post Q.M.
Captain Arthur F. Cassels, Adjutant, 1st Battalion.
1st Lieut. Truby C. Martin, Q.M. & C., 2d Battalion.
- Battery A. Captain William P. Ennis, Commanding Battery.
1st Lieut. Pelham D. Glassford, duty with battery.
1st Lieut. Louis H. McKinlay, duty with battery.
2d Lieut. Joseph O. Daly, Actg. Q.M. & C., 1st Battn.
2d Lieut. Ivens Jones, D.S., School of Fire.
- Battery B. Captain Charles M. Bunker, Commanding Battery.
1st Lieut. Waldo C. Potter, D.S., M.S. School.
1st Lieut. Harold E. Marr, D.S., School of Fire.
2d Lieut. Louie A. Beard, duty with battery.
2d Lieut. Walter F. Winton, duty with battery.
- Battery C. Captain Samuel Frankenberger, Commanding Battery.
1st Lieut. William H. Dodds, Jr., duty with battery.
1st Lieut. Harold W. Huntley, duty with battery.
2d Lieut. George S. Gay, D.S., School of Fire.
- Battery D. Captain Frank E. Hopkins, Commanding Battery.
1st Lieut. Ballard Lyerly, duty with battery.
2d Lieut. Robert C. F. Goetz, duty with battery.
2d Lieut. Joseph Andrews, duty with battery.
2d Lieut. Clyde A. Selleck, D.S., U. S. Military Academy.
- Battery E. Captain Ned B. Rehkopf, Commanding Battery.
1st Lieut. Carroll W. Neal, duty with battery.
1st Lieut.
2d Lieut. Freeman W. Bowley, duty with battery.
2d Lieut. Russell L. Maxwell, duty with battery.
- Battery F. Captain Clarence Deems, Jr., sick, Letterman, Genl. Hosp.
1st Lieut. Harold S. Naylor, Commanding Battery.
1st Lieut. Wilbur Rogers, duty with battery.
2d Lieut. Percy Deshon, duty with battery.
2d Lieut. William B. Rosevear, Jr., duty with battery.
- Unassigned. Captain William S. Browning, D.S., enroute to join.
1st Lieut. Harry Pfeil, D.S., Insp.-Instr., Militia of New York.
2d Lieut. Bernard R. Peyton, D.S., A.D.C. to Gen. Macomb, Mtd. Service School.
- Veterinarians. Vet. Sgn. Lester E. Willyoung, duty with regiment.
Vet. Sgn. Andrew E. Donovan, leave 1 Mo. and 10 Days, Sept. 20, 1913.
- Headquarters,
25th Infantry. Colonel Lyman W. V. Kennon, Commanding Regiment and Post.
Lieut. Col. Carl Reichmann, S.D., Hdqrs. Hawaiian Dept.
Major Ernest B. Gose, Commanding 3d Battn., Regtl. S. C. Off.
Major Vernon A. Caldwell, Commanding 2d Battn.
Major Edmund L. Butts, Commanding 1st Battn.
Chaplain Oscar J. W. Scott, (1st Lt.), duty with regiment, Librarian.
Captain William G. Doane, Adjutant.
Captain Henry S. Wygant, Comsy., Post Ord., Engr. & Sig. Off.
Captain Martin Novak, Q.M., Rgtl. Exchange Off.
1st Lieut. Charles H. Rich, Adjt., 3d Battn., Range Officer.
1st Lieut. Joseph A. Marmon, Adjt., 1st Battn., in chg. Instn. of Recruits.
1st Lieut. William C. Whitener, Adjt., 2d Battn., Asst. to Regtl. Adjt.
2d Lieut. Oswald H. Saunders, B.Q.M. & C., 3d Battn., Ordnance and Athletic Officer.
- Company A. Captain Americus Mitchell, Commanding Company.
1st Lieut. Charles L. Wyman, duty with company.
2d Lieut. Livingston Watrous, duty with company.
- Company B. Captain William G. Fleischhauer, Commanding Company.
1st Lieut. Charles A. Meals, duty with company.
2d Lieut.

Company C.	Captain David L. Stone, sick in quarters. 1st Lieut. 2d Lieut. Clarence L. Tinker, Commanding Company.
Company D.	Captain William S. Sinclair, Commanding Company. 1st Lieut. Clyde B. Crusan, duty with company. 2d Lieut.
Company E.	Captain Charles F. Bates, Commanding Company. 1st Lieut. Horace F. Sykes, D.S., G.R.S., Chicago, Ill. 2d Lieut. Henry B. Post, D.S., Aviation duty, San Diego, Cal.
Company F.	Captain Marshall Childs, Commanding Company, Exchange Off. 1st Lieut. John B. Corbly, duty with company. 2d Lieut. Raymond C. Baird, leave 3 Mos., Sept. 6, 1913.
Company G.	Captain George Steunenberg, Commanding Company. 1st Lieut. William A. Ganoe, duty with company. 2d Lieut. Evan E. Lewis, D.S. at West Point Military Academy.
Company H.	Captain John E. Hunt, Commanding Company. 1st Lieut. Edward G. McCleave, duty with company. 2d Lieut. Albert L. Sneed, duty with company.
Company I.	Captain Samuel P. Lyon, Commanding Company. 1st Lieut. Donald D. Hay, Asst. to Regimental Exchange Off. 2d Lieut. Richard T. Taylor, duty with company.
Company K.	Captain William S. Mapes, Commanding Company. 1st Lieut. Robert P. Harbold, duty with company. 2d Lieut. George R. Harrison, duty with company.
Company L.	Captain Charles L. Willard, Commanding Company. 1st Lieut. James A. Higgins, duty with company. 2d Lieut.
Company M.	Captain Rufus E. Longan, Commanding Company. 1st Lieut. John E. Green, duty with company. 2d Lieut. Patrick J. Morrissey, D. S., West Point, N. Y.
Unassigned.	1st Lieut. Arthur L. Bump, D.S. with Militia, Territory of Hawaii. 2d Lieut. Joseph C. Hatie, Asst. to Post Adjt. 2d Lieut. Matthew A. Palen, Comdg. Regtl. Detch. 2d Lieut. Bernard P. Lamb, duty with regiment.
Medical Corps.	Major Wallace DeWitt, Post Surgeon. Captain Robert M. Culler, duty at post. Captain James R. Mount, duty at post. Captain Edward D. Kremers, duty at post. 1st Lieut. Albert P. Clark, duty at post. 1st Lieut. Joseph L. Siner, duty at post.
Dental Corps.	Actg. Dental Surgeon Albert R. White, duty at post.
Quartermaster Corps.	Major George G. Bailey, Q.M. Corps, Post Q.M.

INDEX

	PAGE.		PAGE.
Ancient Hawaiian Music.....	97	Elevations, Principal Localities, Table of	15
Anniversary, Our Fortieth.....	39	Exports—See Customs Statistics.	
Annual Sugar Exports from 1875 —Quantity and Value.....	32	Expenditures, Receipts and Pub- lic Debt, 1860 to 1913.....	31
Area, Elevation and Population of Hawn. Islands	16	Federal Officials	241
Assessed Values Real and Personal Property, 1913	34	Hawaiian Corporations, Number and Capital, 1913.....	34
Births and Deaths by Nationali- ties and Counties, 1913.....	21	—Contribution to English.....	131
Bonded Debt, Terr. of Hawaii....	31	—Government Changes Since the Monarchy	38
Brief Hist. Hawaiian Unskilled Labor	170	—Homestead of the Future....	158
Calendar, Counting House.....	2	Hawaii's Annual Trade Balance..	30
—Quarterly	7	—Bonded Debt, 1913.....	33
Capacity (Seating) Principal Ho- nolulu Halls, Churches, etc....	29	—Commerce with Foreign Coun- tries, Import and Export Values	26
Census Returns, 1910.....	19	—Plantation Statistics	32
—Latest by Islands.....	18	—Sugar Crops, 1908-1913.....	224
Church Days and Holidays.....	6	Honolulu, In and Around.....	49
Collected Taxes, 1913.....	33	Honolulu Sixty Years Ago.....	84
Comparative Population by Dis- tricts and Islands, 1900-1910...	21	Imports—See Customs Statistics.	
—Table Census Periods, 1860- 1910	21	Insurance Business, 1912.....	30
Coöperation Among Farmers....	154	Illiterates in Population, Terr. of Hawaii, 1910	19
County Officials	241	Kamehameha's Army, Defeat of..	136
Customs Statistics, 1913—		Keanini-ula-o-ka-lani	196
Commerce with Foreign Coun- tries, 1912-1913	26	Moanalua Horticultural Gardens..	75
Exports and Imports	26	Meteorological Observations, Ho- nolulu, 1912-13	35
Import Values from U. S.....	24	Nationality of Plantation Labor 1912-1913	29
Shipments to U. S., Domestic, 1912-13	23	Number and Tonnage Vessels, all Hawn. Ports, 1913.....	28
Quantity and Value Domestic Produce to the U. S., 1913..	27	Ocean and Channel Distances....	11
Debt, Bonded, Terr. of Hawaii, 1913	31	Our Fortieth Anniversary.....	39
Defeat of Kamehameha's Army..	136	Overland Distances, Hawaii and Maui	13
Dimensions Haleakala, Iao Valley	17	Overland Distances, Kauai and Oahu	12
—Kilauea. Mokuaweoweo....	17	Overland Distances, Molokai....	15
Distances, Channel and Ocean....	11	Passengers from and to Hawaii, 1913	29
—Inter-Island, by Sea.....	11	Pepeiao Akua	201
—Overland, Hawaii, Maui....	13	Plantations, Mills and Agencies..	222
— — — Kauai, Oahu	12	Population of Hawaii, Census of 1910	19
— — — Molokai	15	—Estimated, 1913	20
Domestic Products Exported, For- eign, 1913	27		
Eclipses for 1914.....	6		

	PAGE.		PAGE.
Populations of Honolulu and Hilo	19	Real Estate	207
By Age, Sex and Race	18	Shipping Disasters	216
By Race and Sex	20	Stamp Exhibit	206
Postal Service, Terr. of Hawaii	226	Stock and Bond Sales	221
Public Debt, Etc., Terr. of Hawaii	31	Sporting Events	219
Railroading in Hilo	142	Sugar Crop, 1913	221
Rainfall, Principal Stations Hawaiian Islands, 1912-13	36	Seating Capacity Principal Honolulu Churches, Halls, etc.	29
Receipts, Expenditures and Public Debt of Hawaii, 1860-1913	31	School Statistics, Territory of Hawaii, 1913	22
Register and Directory, County Officials	241	Standard and Local Time	17
Register and Directory, Federal Officials	242	Statistics—See also Census and Customs Tables.	
Register and Directory, Territorial Officials	208	—Births and Deaths by Nationalities, etc.	20
Registered Voters by Races, 1904-12	186	—Hawaiian Sugar Plantation, from 1875	32
Retrospect for 1913	203	—Vital, 1913	20
Armstrong Memorial	214	Sugar Plantations, Mills, etc., List of	222
Automobiles	219	Summary of Insurance Business, Hawaii, 1912	30
Banana Claims	220	Table of Elevations Principal Localities	15
Building Notes	208	—Meteorological, 1912-13	35
Civic Convention	212	—Rainfall Principal Localities, 1912-13	36
Ferretting Hawaii's Graft	213	Taxes by Divisions and Counties, 1913	33
Fire Record	215	—Collected for 1913	34
Fitful Kilauea	220	Territorial Officials	208
Floral Parade Events	207	Testing Battelle's Process of Sugar Recovery	191
Homesteads	208	U. S. Points of Hawaiian Supplies, 1912-1913	27
Immigration	211	Value Hawaii's Carrying Trade..	28
Irrigation Projects	211	—of Imports, Foreign, 1913	28
Legislative	204	—of Shipments to the U. S. from Hawaii, 1912-1912	23
Mahuka Site Case	209	Verifying a Royal Birthday	194
May-day Festivities	205	Vital Statistics, 1913, by Islands	21
Musical Treats	214	Width of Channels	11
Naval Drydock Mishap	212		
Necrology	221		
Noted Visitors	214		
Our Minor Industries	217		
Panama Canal	220		
Parasites	220		
Pastor Parker's Jubilee	214		
Public Works	210		
Railroad Extension	213		

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